## CHAPTER I.

## GEOGRAPHICAL EXPLORATION OF IOWA-LAND

In the country of which the present State of Iowa forms an integral part geographical exploration covers a period of about three centuries, reaching down to the very eve of Iowa's attainment of statehood. Forty years had not elapsed since the landing of Columbus on San Salvador before European adventurers had begun determinedly to turn their steps toward the interior of the North American continent. Singularly enough, expeditions from three widely different directions were almost simultaneously headed for the region now known as the Upper Mississippi basin.

The French, who under Cartier, had entered the St. Lawrence river, approached from the northeast. From the southeast the Spanish, led by De Soto, started from Florida and traversed the country to points in what are now Missouri and eastern Kansas. From the far southwest, Coronado, companion to Cortez, with a handful of conquestadores, having gone north from the City of Mexico to Sonora and the Grand Canyon of the Colorado in western Arizona, proceeded eastward to the Rio Grande. Seeking the fabulous City of Quivira, or the Gran Quivira, which was reputed to be 200 leagues northeast of Tiguex (near Albuquerque) he almost reached, before turning back in the summer of 1541, the southwestern corner of our State.

It was, however, a full century later before white-man's eyes actually rested upon Iowa-land. After his first entry into the region of the Upper Mississippi the struggles for its possession became inseparably linked with the fortunes and misfortunes of the three great European nations. For more than one hundred and fifty years prior to the beginning of the nineteenth century every tragic event of the Old World was reflected on these outskirts of civilization.

The first European to visit the Upper Mississippi valley appears to have been Jean Nicolet. as was first shown recently by Shea.<sup>2</sup> In 1634.<sup>8</sup> at the request of Champlain, then governor of Canada, Nicolet left Quebec, passed up the St. Lawrence river, and finally discovering Lake Michigan, entered the Bave des Puans (Green bay) and ascended the Fox river to the portage-point between it and the Wisconsin river. It is important to note that this first established route of Nicolet to the Mississippi river continued for a period of more than 200 years to be a main path of exploration, travel and commerce to the West and to Upper Louisiana.

Before leaving Quebec Nicolet had heard of the existence of a powerful people in the Far West, who were without beards, shaved their heads, and otherwise appeared to resemble Taters. or Chinese. At any rate, our early explorer was fully prepared to meet the Chinese, as is indicated by his record. "At a distance of two days' journey from this tribe [Winnebagoes] he sent one of his savages to carry them the news of peace which was well received, especially when they heard that it was a European who brought the message. They dispatched several young men to go to meet the manitou, that is, the wonderful man; they come, they escort him, they carry all his baggage. He was clothed in a large garment of China damask, strewn with flowers and birds of various colors. As soon as he came in sight all the women and children fled, seeing a man carry thunder in both hands. They called thus the two pistols he was holding. The news of his coming spread immediately to the surrounding places; four or five hundred men assembled. Each of the chiefs gave him a banquet and at one of them at least one hundred and twenty beavers were served. Peace was concluded."4

According to Nicolet's own statement he would have reached the sea, or "Great Water," in three days longer sail, upon a great river. Such being the case historians have speculated on the actual reason of his turning back. It is now clear that he

¹Relation de ce qui s'est passé en la Novvelle France, en l'anneé 1642 and 1643, Par. le R. P. Bartholemy Vimont, A Paris, MDCXLIV.

<sup>&</sup>lt;sup>2</sup>Desc. and Explor. Mississippi Valley, p. 20, 1853.

<sup>&</sup>lt;sup>a</sup>Sulte: Mélanges d'Hist. et de Litt., p. 426, Ottawa, 1876.

<sup>4</sup>Relation de que s'est passé en la Novvelle France, en l'anneé 1642 and 1643, Par le R. P. Bartholemy Vimont, A Paris, MDCXLIV.

misunderstood his early informants and mistook the meaning of the Algonquin words for great water to indicate the ocean instead of a majestic river.

Nicolet had come fully prepared to enter Cathay in royal style. After dressing up in all his oriental finery, expecting to meet some gorgeous mandarin to whom he fancied his arrival had been announced, his disappointment must have been keen in the extreme when his shaven-headed hosts turned out to be only ordinary Sioux redskins instead of Asiatic potentates. At the misconception one hardly wonders. It reflects the prevailing notions of the day. With the aid of a little imagination and with no lack of willingness—one is always inclined to believe what one desires—it was easy to discern in the great water the sea that separates America from Asia, the North Pacific: and in the voyagers the Chinese, or Japanese. It was the opinion of Champlain, of the missionaries, and of the better informed colonists, that by pushing westward it would be comparatively easy to find a shorter road to China, by crossing America, than by that usually followed in rounding the Cape of Good Hope. Ever since the time of Jacques Cartier this idea had haunted the minds of men and they deceived themselves as to the real width of the American continent. They believed that it would be sufficient to penetrate two or three hundred leagues inland in order to find, if not the Pacific ocean, at least a bay or some great river leading there. In this illusion lay the chief incentive to every western exploration of this time.

The first white men actually to view the "Great Water" and to set foot upon what is now Iowan soil appear to have been Pierre Radisson and Médard Groseilliers. In the spring of 1655s these travelers, having spent the previous year around the shores of Lake Huron and having wintered with the Pottawattomies at the entrance to Green bay, determined to visit the Mascoutins, or Fire nation, and other tribes who dwelled to the southwest. Before the snow and ice were melted, he tells in concise language, how with one hundred and fifty of the In-

Butterfield: Hist. Desc. of Northwest by John Nicolet, in 1634, p. 2, 1881.

Jouan: Revue Manchoise, first quarter, 1886; Clarke's translation.

<sup>&</sup>lt;sup>7</sup>Scull: Publications Prince Soc., No. 16, p. 147, Boston, 1885.

<sup>8</sup>Campbell: Parkman Club Pub., No. 11, Milwaukee, 1897.

dians these Frenchmen started westward on snow-shoes and traveled fully fifty leagues when they came to a great river near a point which appears to have been near the mouth of the Wisconsin river. Here they spent nearly a month making canoes and feasting. Radisson's narrative of this part of his travels is as follows:

"Att last we declared our mind first to those of the Sault, encouraging those of the north, that we are their brethren, & that we would come back and force their enemy to peace or that we would help against them. We made guifts one to another, and thwarted a land of allmost 50 leagues before the snow was melted. In the morning it was a pleasur to walke, for we could goe without racketts. The snow was hard enough, because it freezed every night. When the sun began to shine we payed for the time past. The snow sticks so to our racketts that I believe our shoes weighed 30 pounds, which was a paine, having a burden uppon our backs besides.

"We arrived, some 150 of us, men & women, to a river side, where we staved 3 weeks making boats. Here we wanted not fish. During that time we made feasts att high rate. So we refreshed ourselves from our labours. In that time we tooke notice that the budds of trees began to spring, which made us to make more hast & be gone. We went up the river 8 days till we came to a nation called Pontonatenick & Matonenock, that is, the scrattchers. There we got some Indian Meale & corne from those 2 nations, which lasted us till we came to the first landing Isle. There we weare well received againe. We made guifts to the Elders to encourage the yong people to bring us down to the ffrench. But mightily mistaken; ffor they would reply, 'Should you bring us to be killed? The Iroquoits are every where about the river & undoubtedly will destroy us if we goe downe. & afterwards our wives & those that staved behinde. Be wise, brethren, & offer not to goe downe this yeare to the ffrench. Lett us keepe our lives.' We made many private suits, but all in vaine. That vexed us most that we had given away most of our merchandises & swapped a great deale for Castors. Moreover they made no great harvest, being but newly there. Besides, they weare no great huntsmen. Our journey was broaken till the next yeare, & must per force."

The first "landing isle" is definitely identified with Prairie island above Lake Pepin.

During the summer while his brother-in-law remained at Prairie island Radisson and a party of his Indian friends took a long hunting trip. Here are his own words:

"We weare 4 moneths in our voyage wthout doeing any thing but goe from river to river. We mett several sorts of people. We conversed with them, being long time in alliance w<sup>th</sup> them. By the persuasion of som of them we went into ye great river that divides itselfe in 2, where the hurrons wth some Ottanake & the wild men that had warrs wth them had retired."

There is not great difference in their language, as we weare told. This nation have warrs against those of the forked river. It is so called because it has 2 branches, the one towards the west, the other toward the south, wen 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 [the prisoners] have warrs against men that build great cabbans & have great beards & had such knives as we have had. Moreover they shewed a Decad of beads & guilded pearles that they have had from that people, wen made us believe they weare Europeans. They shewed one of that nation that was taken the yeare before. We understood him not; he was much more tawny then they wen whome we weare."

There is no doubt that Radisson and his associate first reached the Mississippi river and gazed out upon the high bluffs of Iowaland at about where McGregor now stands. The travelers appear to have descended the river some distance and to have set foot on its west bank. They found the Indians in possession of mines of lead and zinc and the hills filled with alabaster (probably the translucent brittle stalactites with which the Dubuque district is now known to abound).

<sup>&</sup>lt;sup>9</sup>Upham: Minnesota in Three Centuries, Vol. I, p. 141, 1908.

<sup>10</sup>Thwaites states that a large party of Hurons and Ottawas, while being driven before the storm of Iroquois wrath, had, a short time before Radisson's visit, settled on an island in the Mississippi river above Lake Pepin, but had finally proceeded up the Chippewa river to its source.

<sup>11</sup>Pub. Prince Soc., No. 16, p. 167, 1885.

It is, however, the west branch of the "Forked River", as Radisson calls the Mississippi, which has long puzzled historians. Thwaites<sup>12</sup> is of the opinion that it may have been the Iowa river. Richardson<sup>13</sup> in his sketch of "Muscoutin, a Remniscence of the Nation of Fire" considers it the Upper Iowa river. There appear to be good reasons for believing that this west fork was really the Missouri river.

Radisson's information on this point was manifestly hearsay. The notion derived by the French from the Indians before Radisson's visit was that there was a great river which flowed to the South sea. It was not until some years later that LaSalle proved that Marquette's great stream which was called the Rivière de la Conception and DeSoto's great river which he designated the Rio de la Espiritu Santo were only different parts of the same watercourse. On maps which appeared a decade or two later, la grande rivière is represented as forking about where the Missouri river enters; and the west branch ends abruptly somewhere in what is modern Texas, indicating that bevond that point its course was vet unknown. Franquelin's map of the Mississippi valley, published in 1864, shows this feature in a striking manner. On Hennepin's map of 1698 and others of that time the present Missouri river is continued westward and mingled with what is now called the Arkansas river.

The "Much more tawny" Indian prisoner from the Far West, which Radisson mentions, clearly indicates the Apache and the bearded men with which the latter carried on war correspond to the Spaniards of the Southwest. Radisson's surmises that they were Europeans was thus doubtless correct. His further description of the characteristics of the Apaches as he was told leaves little question that his informant had acquired his knowledge at first hands. The episode is significant in demonstrating the wide intercourse existing among the native races of the continent.

On the other hand, Upham<sup>14</sup> has recently tried to show that the "great river that divides itselfe in 2" and the "Forked river" are distinct streams, and to identify the first of these with the

<sup>&</sup>lt;sup>12</sup>Coll. Wisconsin State Hist. Soc., Vol. XI, p. 70, 1888.

<sup>18</sup>John Brown Among the Quakers and Other Sketches, p. 68, 1897.

<sup>&</sup>quot;Minnesota in Three Centuries, Vol. I, p. 155, 1908.

Illinois river, and the second with the Missouri river. From the internal evidence of the Frenchman's account it is not so evident, as the recent author states, "that Radisson and his companions went southeastward from Prairie island and hunted entirely on the east side of the Mississippi river, going by portages from one river to another until they reached the Illinois, 'the great river that divides itselfe in 2', so-called apparently because it is formed by the junction of the Des Plaines and Kankakee, each an important canoe-route." Upham appears to put considerable stress upon the statement of the Jesuit Relation of 1659-60, which relates that the Hurons and the Ottawas retreated thither and were kindly received by the Illinois tribes; and he intimates that during Radisson's hunting-trip might be learned all that the latter narrates of the "Forked river" and the people there and beyond.

At the time of Radisson's trip, and for a number of years after, Illinois tribes were occupying also the country west of the great river. Had the Frenchman gone southeastward from the Prairie island it would have taken him directly back to the country which he had just left; and it is not probable that this was his desire. His own statements seem to express curiosity to visit the country to the southwest of the Fox River district. His trip would naturally be directed to the southward, if not southwest, mainly in what is now Iowa and northern Missouri, where he would soon hear much of the anomalous watercourse.

So marvelous phenomenon as a "great river that divides itselfe in 2" would hardly apply to the coming together of two small creeks at the headwaters of such a stream as the Illinois river. As gleaned from other sources the report of the division of the great river must necessarily refer to its lower reaches and was a noteworthy fact known widely among the Indians. Under slight misconstruction on part of Europeans not thoroughly familiar with the native tongues, they could readily interpret the Indian words to indicate that far to the south the river actually separated into two distinct channels and thus flowed on to the ocean. Because of the fact that the main Indian route of travel to the Far Southwest was on the western branch of this river it was natural to suppose that the stream

flowed in a southwest direction instead of eastward. It is a well known fact now that the Missouri river for a distance of 30 miles above its mouth actually flows to the northeast; thus apparently it is directed up-stream against the Mississippi river.

That the eastern Indians widely knew of this "Forked river" before Radisson's visit to the Mississippi valley is clearly indicated in his own account of his captivity some years previously among the Iroquois on the Mohawk river in what is now central New York state, when he incidentally mentions hearing of the great divided river from one of the tribe who had been in the far west.

` A predecessor of Joliet and Marquette who, for a long time was thought<sup>15</sup> to have passed down the famous canoe-route of Indian travel, via Green bay, Fox river, and the Wisconsin river, to the "Great Water," is Father Renè Ménard, a Jesuit missionary who in 1660 came out from Quebec to Chequamegon bay, on the south shore of Lake Superior east of the present city of Duluth. Late investigations<sup>16</sup> appear to show that Ménard probably never actually reached the mouth of the Wisconsin river, but that he left the Lake Superior mission directly across country for the headwaters of this stream, down which he floated to the point of portage to the Black river, where he lost his life. This was in August. 1661. Ménard was on his way to visit the Huron nation then sojourning on the Black river. This nation recently driven from their eastern home by the Iroquois had, a short time before, reached Green bay, passed up the Fox river and down the Wisconsin river to the Mississippi, which they ascended to the Black river.17 The aged Father was not with the Hurons at the time of their flight.

In 1669 Father Allouez who, for four years had had charge of the mission of the Holy Ghost at La Pointe, on Chequamegon bay, Lake Superior, returned to Sault Ste. Marie and Father Marquette took his place. Allouez longed to visit the Sioux country and see the great water which the Indians called the Missi Sepe. He says: "Ce sont peuples qui habitent au Couch-

<sup>&</sup>lt;sup>15</sup>Winchell: Geol. Minnesota, Vol. I, p. 4, 1884; also, Neil: Minnesota Hist. Soc., Vol. II, p. 205, 1867.

<sup>16</sup>Campbell: Parkman Club Pub., No. 11, Milwaukee, 1897.

 <sup>&</sup>lt;sup>16</sup>Campbell: Parkman Club Pub., No. 11, Milwaukee, 1897.
 <sup>17</sup>Relations de Novvelle France, en l'anné 1663, p. 21, Quebec ed.

ant d'icy, vers la grande revière, nommé Messipi." This appears to be the first mention in literature of the word "Mississippi."

Preceding Marquette by a full lenstrum in the Upper Mississippi basin was a Nicolas Perrot, one of the most capable and influental of all the French emissaries among the western Indians and one who rendered France great services in attaching them to her cause in the New World. Until recently little was known of this really remarkable coureur de bois. In 1864 his manuscript notes were found in Paris, covered with the accumulated dusts of more than two centuries, and published by Father J. Tailhan, with copious explanations.

Perrot left the east sometime in 1665, and spent several months with the Pottawatomies around Green bay. In the spring of the following year he passed up the bay, entered Fox river, and visited the Outagamies, or Foxes, who dwelled above Lake Winnebago. Later he made a journey to the Mascoutins and Miamis who occupied the country around the headwaters of the Fox river and to the south. By Tailhan great importance is attached to this visit as it brought the French into friendly communication with the kindred of the Illinois, and gave them their first footing in the great valley of the Mississippi. Having obtained this footing, the further discovery and opening up of the country were only questions of time.<sup>20</sup>

Between the years 1665 and 1670 Perrot seems to have visited most of the western tribes, besides trading extensively with them. In the last mentioned year he made a trip to Montreal; but soon returned with St. Lusson's expedition to Sault Ste. Marie, he himself pushing on to Green bay. In May of 1671 he returned to the Sault in company with many Indian chiefs to complete the alliance with the French. From there Perrot returned to Quebec where he lived for ten years before again venturing back to the Mississippi River country.

Still another Jesuit missionary may have visited the Mississippi river before Marquette. Father Dablon who was sta-

<sup>18</sup>Relations de Novvelle France, en l'anné 1667, chap. xii, p. 23, Quebec ed.
19Memoire sur les Moeurs, Coustumes et Religion des Sauvages de l'Amerique
Septentrionale, par Nicolas Perrot, Publié pour la primière fois par le R. P. J. Tailhan
de la Compagne de Jésus, Leipzig et Paris, Librairie A. Franck, Albert L.
Herold, 1864.
20Stickney: Parkman Club Pub., No. 1, p. 4, Milwaukee, 1895.

tioned in the Green Bay region for a time was a traveler of wide experience. He writes in 1670 of a great stream to the westward more than a league in width which flowed to the south more than 200 leagues. However, his information on this point may have been derived from hearsay.

At this time Father Marquette was in charge of the mission of the Holy Ghost, at La Pointe, on Lake Superior. He writes that "When the Illinois [tribes then living on the west side of the Mississippi river at the mouth of the Des Moines river] come to La Pointe they cross a great river which is a league in width, flows from north to south and to such a distance that the Illinois who do not know what a canoe is, have not yet heard any mention of its mouth." Thus Marquette also had definitely heard of the great stream which three years later he was destined actually to behold.

Marquette reached the Mississippi river in the summer of 1673. Soon after he had returned from his trip there was published a map of the new discoveries made by the Jesuit fathers in 1672. This map is especially noted by Parkman. On it is marked the route of travel of some missionary or traveler who had gone down the Wisconsin river to the Mississippi, down the latter to the mouth of the Des Moines and thence directly eastward to the Illinois river and the present site of Chicago. This route now appears to be intended for that of Marquette, the return path being incorrectly located.

Special interest attaches to the canoe-voyage in 1673 of Sieur Louis Joliet and Pere Jacques Marquette, who so long have been regarded as the discoverers of the Upper Mississippi river, and the first white-men to set foot on Iowa soil. On the 17th of June, these two travelers and several attendants entered the Mississippi river from the Wisconsin. Floating down the Great Water for several days they finally made a landing on the west bank. As shown by their maps the point was immediately above a large stream on which were located the Moingouena tribes, the present Des Moines river, and upon Iowa soil.

Along what is now the eastern boundary of our state Marquette graphically describes<sup>21</sup> the natural features, the animals,

<sup>&</sup>lt;sup>21</sup>Jesuit Relations and Allied Documents, Vol. LIX, p. 109, Cleveland, 1900.

and the plants. As this is the first definite account of a circumscribed field of our land some of his paragraphs are reproduced from the translation. "Here we are, then, on this renowned River, all of whose peculiar features I have endeavored to note carefully. The Mississippi River takes its rise in various lakes in the country of the Northern Nations. It is narrow at the place where Miskous empties: its Current, which flows southward, is slow and gentle. To the right is a large Chain of very high Mountains, and to the left are beautiful lands: in various Places, the stream is Divided by Islands. On sounding, we found ten brasses of Water. Its width is very unequal: sometimes it is three-quarters of a league, and sometimes it narrows to three arpents. We gently followed its Course, which runs towards the south and southeast, as far as the 42nd degree of Latitude. Here we plainly saw that its aspect was completely changed. There are hardly any woods or mountains. The Islands are more beautiful, and are Covered with finer trees. We saw only deer and cattle, bustards, and Swans without wings, because they drop Their plumage in this Country. \* \* \* When we reached the parallel of 41 degrees and 28 minutes, following The same direction, we found that Turkeys had taken the place of the game; and the pisikious, or wild cattle, That of the other animals.

"We call them 'wild cattle', because they are very similar to our domestic cattle. They are not longer, but are nearly as large again, and more Corpulent. When our people killed one, three persons had much difficulty in moving it. The head is very large, The forhead is flat, and a foot and a half Wide between the Horns, which are exactly like Those of our oxen, but black and much larger. Under the Neck They have a Sort of large dewlap, which hangs down; and on The back is a rather high hump. The whole of the head, The Neck, and a portion of the Shoulders, are Covered with a thick Mane Like That of horses; It forms a crest a foot long, which makes them hideous, and, falling over their eyes, Prevents them from seeing what is before Them. The remainder of the Body is covered with a heavy coat of curly hair, almost Like That of our

sheep, but much stronger and Thicker. It falls off in Summer, and The skin becomes as soft As Velvet. At that season, the savages Use the hides for making fine Robes, which they paint in various Colors. The flesh and the fat of the pisikious are Excellent, and constitute the best dish at feasts."

Referring to the landing on Iowa soil the venerable father continues: "Finally, on the 25th of June, we perceived on the water's edge some tracks of men, and a narrow and somewhat beaten path leading to a fine prairie. We stopped to Examine it; and, thinking that it was a road which Led to some village of savages, We resolved to go and reconnoiter it. We therefore left our two Canoes under the guard of our people, strictly charging Them not to allow themselves to be surprised, after which Monsieur Jollyet and I undertook this investigation—a rather hazardous one for two men who exposed themselves, alone, to the mercy of a barbarous and Unknown people. We silently followed the Narrow path, and, after walking About 2 leagues, We discovered a village on the bank of a river, and two others on a Hill distant about half a league from the first."

It is usually considered that the immediate mission of Joliet and Marquette's voyage was the discovery of the great river. The inference is mainly gained from perusal of the latter's journal. For a period of nearly two centuries Marquette's account of the journey was the only accessible information. Joliet's original notes and maps were lost through shipwreck when he had all but reached home. He prepared other descriptions and maps which he submitted to the Governor of Canada. It is no disparagement to the important services rendered by the brave Jesuit to state that it now transpires that Joliet was really the official commander of the expedition and that the priest accompanied him in a very secondary capacity.

There is sufficient honor accruing to Marquette and Joliet for laying the foundations of the French claims to the vast Louisiana country—the heart of the American continent. This was the practical result of their efforts, the consummation of which came in after years. That the real purpose of the expedition was entirely different from what Marquette's narrative would lead us to suppose is amply sustained by the

contents of recently unearthed letters and documents of the time. Among these is a letter written by Frontenac, Governor of Canada, to Cobert, then Minister of State at Paris, on the return of Joliet to Quebec, clearly showing that the primary object of the exploration was the finding of the South sea and a feasible way by which to reach it. Exploration of the great river, it was fancied, would solve the puzzle.

In the spring of 1680, La Salle, who had established a post which he called Crève Cœur, on the Illinois river, near where Peoria now stands, sent one of his lieutenants. Accoult by name, to the upper Mississippi region. Accompanied by a father Hennepin and a single boatmen, Accoult floated down the Illinois river to its mouth and then ascended the greater river. He thus alludes to the Iowa part of the country: "The River Colbert (the Mississippi) \* \* \* runs between two chains of mountains, very small here, which wind with the river, and in some places are quite far from the banks, so that between the mountains and the river there are large prairies where you often see herds of wild cattle browsing. In other places these eminences leave semi-circular spots covered with grass or wood. Beyond these mountains you discover vast plains, but the more one approaches the northern side ascending the earth did not appear to us so fertile nor the woods so beautiful as in the Illinois country."

The little company was soon captured by a war-party of Dakotah Indians, who carried them up Mille Lac. On reaching the falls of the Mississippi river the Recollet friar named them the Sault de St. Antoine de Padua. Although Hennepin's book of his travels had a wide circulation at the time of its appearance, there is really very little in it descriptive of Iowaland. After his release from the Indians Hennepin descended the great river to the mouth of the Wisconsin river, passed through Fox river and Green bay and returned to Montreal.

During the same year Du l' Hut (Duluth) who had been for several years in the government service in the Lake Superior region, passed over to the St. Croix river which he descended to the Mississippi. Here he heard of the captivity of three Europeans farther down the stream. He immediately sought them out and found Accoult's party, which he liberated and accompanied to the mouth of the Wisconsin river, and thence to the St. Lawrence. Little reference is made by this famous explorer to his trip along the Iowa border.

In 1681 Nicolas Perrot appears again to have entered the western fur-trading business. Two years later he was sent into the western country to get the support of the various Indian tribes with which he was acquainted, for an attack on the Iroquois. It appears proable that at this time<sup>22</sup> he established Fort St. Nicolas on the Mississippi river, a short distance above the mouth of the Wisconsin, and a little way below the present city of Prairie du Chien.

After reaching Green bay, as commandant, in 1685, Perrot passed on to the Mississippi, and up that stream, establishing the trading-post of Fort Antoine, on Lake Pepin. He immediately inaugurated extensive trading transactions with the Aiouez Indians, (Ioways), who then dwelt to the southwest. Four years later he formally took possession of the country for France. The same year he established another post nearly opposite the present city of Dubuque, and began the mining and smelting of lead-ore, in addition to his fur-trade. Perrot was active in this region until 1699, when he returned to the banks of the St. Lawrence, where he died about twenty years afterwards.

On Hennepin's map of the Mississippi region, which appeared in 1683, the great stream is designated as the Rivière de Colbert, after the French minister. So far as Iowa-land is concerned this map shows little. There are no streams represented as coming into the Mississippi from the west, and the great stream itself from the mouth of the Missouri southward is not represented. Along the Iowa part of the stream the course is perfectly straight. A range of mountains is represented on the west bank throughout the extent of the Iowa section.

Although Lahontan's "New Voyages to North America" which first appeared in 1788, passed through many editions, in several languages, some of his accounts of his geographic

<sup>22</sup>Stickney: Parkman Club Publications, No. 1, p. 12, Milwaukee, 1895.

explorations in Canada have been lately believed to be entirely fictitious. Careful perusal of them seems to indicate that they have larger foundation in fact than these later assertions have claimed. There is little of strictly geographic value to Iowa, except that Lahontan appears to have been the first European to traverse the headwaters of the Des Moines river. This was in 1683. The celebrated Rivière Longe which is associated with Lahontan's name, and which is now generally regarded as applying to some stream of the fancy seems really to have some foundation for its usage. This traveler in the Upper Mississippi region took with him to France a sketch or map painted on a buffalo-skin by the Indians with whom he had come in contact. From these natives he evidently heard of the Columbia river running into the western ocean. The Upper Missouri river probably was a part of his Long river. In the light of more recent information bearing upon that time Lahontan's descriptions deserve careful examination anew before they are wholly condemned.

On the best and most accurate map published up to the year 1688, "Partie d'une Carte de l'Amerique Septentrionale, dressée par J. B. Franquelin, dan 1688, pour être presentée a Louis XIV", Iowa-land is still but meagerly represented. Rivière des Moingona is a term applied to the main stream; and its then unnamed main branch now called the Raccoon river is located. At the junction-point of the two streams is located the chief village of the Moingona Indians.

In 1695 Perrot began to have active competition in his furtrading business and in mining in the vicinity of present Dubuque. Among others, a trader by the name of Le Gueur established a post on an island in the Mississippi river directly opposite the site of Dubuque's town.

The chief importance attached to the movements of Pierre Le Sueur in the Upper Mississippi valley lies in the fact of his establishing a new trade-route to the sea. He already had been in the region for nearly a score of years before his most famous exploit took place. In the interests of trade he appears first to have visited the country in 1683 in company with Per-

rot.<sup>23</sup> Later, after he had been made commandant at Chequamegon bay, he located a trading-post, in 1695, on an island in the Mississippi river, above Lake Pepin, which prospered for a time. During his sojourn in the region he no doubt became widely acquainted with its great commercial possibilities.

Le Sueur went to France and obtained a commission from the King to open certain mines. In casting his fortunes with D'Iberville's expedition to settle the lower Mississippi region, it is suspected that his real purpose was to turn the new commercial acquirements at the headwaters of the great stream southward to the Gulf instead of permitting them to continue eastward to the St. Lawrence, as had been the custom for many years.

Early in April, 1700, Le Sueur, with twenty-five men, set out from Biloxi, to ascend the Mississippi river. When they reached the rapids above the mouth of the Moingona (Des Moines) river they were compelled to unload their boats and to drag them for a distance of seven leagues. Thus these famous rapids were very early recognized as serious obstacles to navigation. Le Sueur observed that on the west side of the rapids open prairies existed for a distance of at least ten leagues, and that the grass was like clover, supporting large numbers of animals. Some distance farther up-stream in the vicinity of the present city of Dubuque, the mines of Nicolas Perrot were encountered.<sup>21</sup> On the east side of the river the Galena river was designated as the Rivière a la Mine. Thus Le Sueur noted carefully the features along the entire eastern boundary of the present state of Iowa.

Le Sueur spent the winter on the Minnesota and Blue Earth rivers among the Ioway Indians. He is reported to have extracted a large quantity of copper-ore and to have sent 4,000 pounds of it down the river to the Gulf settlements. Geologists who have recently visited the locality of Le Sueur's alleged copper mine near the former site of his Fort l'Huilliers pronounce the green earth wholly unmetalliferous.<sup>25</sup> Historians

"Winchell: Geol. Surv. Minnesota, Vol. I, p. 18, Minneapolis, 1884.

<sup>&</sup>lt;sup>28</sup>Shea: Early Voyages Up and Down the Mississippi, p. 89, Albany, 1861.

<sup>24</sup>Mem. et doc, pour servir la l'histoire des origines Francaise des pays d'outremere, t. V, p. 412.

have long speculated upon the fact that nothing more was ever heard of the ores the discovery of which was given so great an amount of distinction. The true explanation seems to be suggested in an official letter of the day recently unearthed in Paris, from the Intendant Champigny to the French minister<sup>24</sup> in which the former complains that "I think that the only mines that he (LeSueur) seeks in those regions are mines of beaverskins."

The astuteness of this remark is all the more apparent when it is remembered that during the year previous Louis XIV. had ordered all the western trading-posts to be abandoned, and the traders and soldiers to return to Lower Canada in anticipation of war with England. While in France Le Sueur no doubt had early heard of the intended changes, and setting his wits together had looked ahead a little by securing a commission for mining, knowing full well that once in the abandoned territory he could secure furs just as well as before. Exported to France from Gulf of Mexico no question would be asked concerning the violation of the King's orders.

At this time the fur-trade was under the complete control of La Compagnie des Cent Associés of Montreal, and all pelts were sent eastward to this market. Le Sueur's fifteen years previous experience in the upper Mississippi region had doubtless convinced him that he could not conduct the business of buying and selling furs independently of this clique. The fact that along with his alleged cargo of green copper-earth, over which he made so much ado, he sent south several hundreds of fine beaver robes, besides many other rare and valuable pelts suggests that his "disappointment" in mining was amply appeased in other directions. Whether fur-trading and not mining was the real incentive for his expedition is not a matter of record; but Champigny's surmises, in the light of later information on the subject, seem quite plausible.

When Louis XIV. recalled to Lower Canada all French soldiers and voyageurs from the Upper Mississippi country in preparation for war with Anne of England there were four main lines of travel to the west. They were the Lake Superior

<sup>&</sup>lt;sup>26</sup>MS. in Ministre des Colonies, t. XV, ch. xi, fol. 39, Paris,

route, the Wisconsin River route, the Illinois River route, and the Wabash River route. It was Le Sueur's particular mission to open up a new trade-way to the south.

With the settlements on the Mississippi river below the mouth of the Missouri as a center (Kaskaskia was established in 1695) exploration of western rivers went on rapidly. In the interests of trade Frenchmen ascended all the principal streams the Arkansas, Red, Missouri, Des Moines, Iowa and Mississippi rivers. As early as 1703 a party of French attempted to reach the Spanish settlements on the Rio Grande in New Mexico by way of the Missouri river. Bienville, governor of Louisiana. states that there were in 1704 more than one hundred Frenchmen located on the Mississippi and Missouri rivers alone. In the following year one Laurain, with a number of companions, started up the Missouri river; and a year or two later a Nicholas de la Salle also ascended that stream with a large party. Beaurain thinks that the evidences of extensive early mining in the Osage country were the work of this party. About this time (1708) the French appear to have gone up the Missouri river as far as the mouth of the Platte, where the hostile attitude of the fierce Pamis (Pawnees) prevented further progress in that direction and at that time. After Iowa-land was first sighted by European on its east side it took a full halfcentury to reach by water the western border.

From this time onward for a full century, down to the very date of the purchase of Louisiana by the United States our principal river and the largest watercourse which Iowa can call all her own was the most important of all trade-routes between the Lower Mississippi markets and the northwest furcountry. On account of the presence of numerous marshes and lakes around the headwaters of the Des Moines, ladened canoes and even larger craft were able, in the spring of the year especially, to pass without portage from Hudson bay and Lake Winnipeg up the Red river of the North, thence by the Blue Earth and other streams into the Des Moines basin. Owing to the fact of a general lack of exact knowledge concerning the northwest country European map-makers were inclined to ascribe to Des Moines river an undue importance. Some of

the maps of that day, as the Senex map of 1710, confound the Upper Missouri river with the upper reaches of the Des Moines. On the De l'Isle "Carte du Canada," published in Paris in 1703, the Des Moines river is displayed as the longest stream on the North American continent. The Mississippi drainage system is represented as a huge trident reaching up from the Gulf of Mexico. There are few or no tributaries shown. The Des Moines river forms the great central prong, much larger and longer than either of the other two—the Mississippi or Missouri rivers. The Des Moines river is the great middle river.

The importance of the Des Moines river as an early path of commerce is indicated in the history of the name. Marquette's name Moingouena refers only to the Indian tribes which he found dwelling near the mouth of the stream in 1673. On Joliet's map the river is caller the Ouacinatanas. This map was made in Montreal immediately upon his return from the explorations with Marquette in 1674. On another of his maps it is designated as Moengouena. It is probably the first map of the region which was based upon definite knowledge. From this period to the present time various names have been used and various spellings have been followed of the title which has survived. Some of the various spellings to be especially noted are De Moin, Des Moins, Demoin, Demoir, Demon and De Moyen.

The name Des Moines is the oldest European title known to our state. As applied to Iowa's leading natural feature, the one mainly instrumental in determining her boundaries as a state, the term has an unusual and complex origin, and an evolutionary history covering a period of more than two centuries. In the changes which the name has undergone is reflected the political vicissitudes of four great nations. Successively has French, Spanish, English and American influence dominated. In final form it is a beautiful, simple and euphonious name, apparently perfect French, and usually glibly translated into "of the monks." Its derivation from anything relating to the early missionaries is always puzzling. However, its monastical association appears never to have

been nearer than the fertile imagination of a Philadelphia printer's clerk.

The first use of the Algonquin word Mikouang, corrupted to Moingouena, for the river appears to be different from the supposed still further corruption of a later date. After Joliet and Marquette's time the name was long used, and appeared on most maps of the region during a period of more than a hundred years. The name is still preserved in the hamlet of Moingona on the right bank of the Des Moines river in Boone county. Coues, following Nicollet, sums up the opinions of the supposed origin of the term from this source by saying that "The Indians called their place Moingona, Moingonan, or Mouingouinas—a word found in some form on very old maps. Later, the French clipped the word to Moin, calling the people Les Moins, and the river La Rivière des Moines, by spurious etymology. Traces of this history of the name survive in its various spellings."

Nicollet, a French engineer, who mapped the Upper Mississippi valley for the Federal government in 1835 and the following years and who was particularly inquisitive concerning the origin of geographic names states<sup>27</sup> that "The name which they gave their settlements was Monin-gouinas (or Moingona, as laid down in the ancient maps of the country), and is a corruption of the Algonquin word Mikouaug, signifying at the road. The Indians, by their customary elliptical manner of designating localities, alluded, in this instance, to the well-known road in this section of the country, which they used to follow as a communication between the head of the lower rapids and their settlement on the river that empties itself into the Mississippi, to avoid the rapids. This is still the practice of the present inhabitants of the country."

As a rule the English maps of the Upper Mississippi region, and the French maps based upon data obtained through Canadian sources previous to the relinquishment by France of all her American possessions to England and Spain in 1763, adhere to the name Moingona for the Des Moines river. The De l'Isle "Carte du Canada ou de la Nouvelle France," published

Twenty-sixth Cong., 2nd Sess., Sen. Doc. 237, p. 20, 1843.

in 1707, and which was the work of two of the most distinguished cartographers of the time, the De l'Isle "Carte de la Louisiane et Cours du Mississippi," printed in Amsterdam in 1722, and the Senex "Map of North America," dated 1710, all have R. de Moingona. Towards the close of the Eighteenth century some of the cartographic sketches of the region, as the Winterbotham map of 1795, for example, which is practically a summary of the knowledge of the country previous to the explorations of Lewis and Clarke under the auspices of the United States government, have the name reduced to merely Moin.

After the year 1763, when Canada passed into control of England, and the French fur-trade was diverted mainly and permanently to the Lower Mississippi region, and when traders of other nationalities began to get a foot-hold upon the northwest business the new commercial adjustments brought about changes in geographical nomenclature. The Moingona tribes no longer dwelled at the mouth of the stream which bears their name, and the word no longer had to the traders a definite meaning. A new word of similar pronunciation but of different spelling and meaning appears to have taken its place—a word which meant much to all French voyageurs of the day. This title applied to a waterway designated it as the Middle River.

As already noted the Des Moines river was for a period of more than a century and a half the only uninterrupted path of canoe-travel between St. Louis and the Hudson bay and Saskatchewan fur-country. In the sense of a great middle traderoute the name has special significance. This distinction it enjoyed until the advent of the railroad. Even in the early days of Iowa's statehood the Des Moines river was considered a quite pretentious water-way. During spring floods steamboats from the Mississippi river service regularly came up so far as the Raccoon forks. Smaller steamboats plied between that point and the Lizard fork (Fort Dodge). In order to make the stream more suitable for boat-travel at all times an elaborate system of slack-water navigation was proposed, and begun with governmental aid. Careful surveys were made and sites for dams located at regular intervals. Several of these contruc-

tions were commenced, but only one was actually completed before the iron-horse appeared in the region and the whole undertaking was given up.

When Major Pike took his famous trip up the Mississippi river in 1805, he found De Moyen a name in general use, and he referred thus to it all through his narrative without comment. The editor of his Travels adding a vocabulary to the book translates the word as River of the Means. Since that day historians have been puzzled at the meaning. Without reference to the real trade conditions of the time it is quite meaningless.

The trade use of the title River de Moyen during the quarter of a century immediately preceding and following 1800 has a significance which appears to have generally escaped notice. We get a hint from Featherstonhaugh in regard to another and more familiar geographic title, the origin of which is even more abstruse than the term under consideration. In his "Excursion through the Slave States," in 1834-5, he states, concerning the name Ozark, now generally applied to the elevated and mountainous country lying in Missouri and Arkansas between the Missouri and Red rivers and the Mississippi and Neosho rivers, that "It was the custom of the French Canadians to abbreviate all their names. If they were going to the Arkansas mountains they would say they were going Aux Arcs, and thus these highlands have obtained the name of Ozarks from American travelers."

From what is known of the literature and custom of the same time it appears probable that our name Des Moines had an origin very much the same as Ozark and a number of other words. The phrase De Moyen with its pronounciation almost indistinguishable from that of the word as we now know it, means literally "from, or of, the middle"—country or river being understood. So the French voyageurs, on arriving from up-stream at the great trading-post of St. Louis, when speaking of that part of the region from whence they came, naturally replied in the usual abbreviated form "De Moyen." The great Middle country between the Mississippi and Missouri rivers and occupied by the great Middle river actually pos-

sessed a very appropriate title. The name De Moyen thus appears to have been attached to a definite geographic feature in the same way as was the title Ozark.

The special fitness of the title Rivière de Moyen, as signifying Middle river is shown on many maps. One in particular, made in 1720, by the Capuchin Père Le Grand, of Chalon, in the department of Saone, France, is a globe seven feet in diameter and now deposited in Dijon. A copy of the part referring to Iowa-land was some years ago made for Father Laurent, of Muscatine, by the public librarian of Dijon, and presented to the Iowa Historical Department.

Although in pronunciation almost identical with the earlier used terms De Moin and De Moyens the name Des Moines as signifying River of the Monks requires small consideration. This spelling and use appears not to have been adopted before the American occupation of the Louisiana country in 1803. Small wonder is it that the new-comers did not always at first grasp properly the strange names. Pike's editor seems to have been the first to introduce the name in this sense; and so places it on the map accompanying the Travels. During territorial days early settlers of Iowa were accustomed to account for the meaning by allusion to the trappist monks (Moines de la Trappe) living among the Indians of the American bottoms. Beltrami, an Italian traveler, who ascended the Mississippi river by steamboat in 1823, translates the name and calls the stream the Monk river, thus reflecting the association.

Thus from three words of very different meanings and quite distinct spellings, but of almost identical pronounciations Des Moins (corrupted from Moingona), De Moyen, and Des Moines (monks), the name of our chief river and capital city has been evolved.

Two other names of Iowa's chief river deserve mention in this place. One is Keosauqua, or Keoskawqua as it is lettered on "Galland's Map of Iowa" published in 1840. The principal town on the river at one time was Keosauqua, in Van Buren county.

Still another title for the stream is its earliest known Sioux name, Inyanshashawatpa, meaning Redstone river. The appro-

priateness of this term might not be readily inferred except by those quite familiar with all the features of the Des Moines valley. In Marion county, in the central part of the state, the river flows through a deep gorge of red sandstone. The bright, towering vermillion cliffs attract wide attention. In the days when the stream was the great highway to the northwest these mural shores were the wonder of all. Many a traveler has gone into ecstacies over their majestic splendor, and has speculated wildly upon their origin. Today the little, almost deserted, hamlet of Red Rock lies nestled under one of the most brilliantly colored of the canvon walls. The place was once an important landing for boats. A railroad now winds through the valley for many miles: but at the great red rock it makes a wide detour inland through deep ravines, and passes around this most interesting spot. The tourist just misses the most gorgeously picturesque bit of scenery to be found anywhere in all the Mississippi region.

When, in 1713, Louis XIV issued to a Paris merchant, M. Crozat by name, a patent which granted a monopoly of trade in all the Mississippi valley for a period of fifteen years, the direct results were in a commercial sense, negative. After a few years all rights were turned over to other interests. The greed for gold greatly stimulated exploration. The map of the Mississippi valley published by John Law, the famous Paris financier, in 1721, amply attests the wonderful progress in the geographic knowledge of the region during the previous two decades. At this time boats were continually passing on every river in Iowa-land.

For the next hundred years few important additions were made to the geography of the area now occupied by our state. When with the Peace of Paris, France in 1763, relinquished her control over all her vast colonial possessions in the New World, Canada and all territory east of the Mississippi river passed under British dominion, and all west of the great stream was ceded to Spain, two notable changes at once effected the development of the commercial interests of this region. The lucrative fur-trade of the Northwest which for so many years afterwards remained in the hands of the French, was entirely di-

verted from its long established eastern route to the St. Lawrence settlements to a course southward, down the Mississippi river. English adventurers from the colonies on the Atlantic sea-board pushed westward for the first time in numbers to and even beyond the confines of the newly acquired lands.

Prominent among these Englishmen, and first to leave a permanent record of his travels, is a Captain John Carver. With Iowa-land Carver's explorations have little to do. He passed up the Mississippi river from the mouth of the Wisconsin. Carver was the first person to bring prominently before the notice of the English-speaking races the vast resources of the Upper Mississippi valley. His story was one of the most widely read books of the day, as is attested by the fact that it passed through no less than twenty-three editions and was translated into the Dutch, French, and German languages.

The first actual settlement to be made on Iowa-land may be set down as Dubuque's mines, or simply Dubuque, as it was afterwards designated. Julian Dubuque began to build his own residence and other houses for his men and the lead smelter in 1788, at the mouth of Catfish creek at the south edge of the present city bearing his name. Here he continued to reside until his death in 1810. However, mining had been conducted more or less continuously for more than a century and a half prior to Dubuque's coming; and in the neighborhood there had been established a trading-post for over one hundred years.

With the purchase of the Louisiana country west of the Mississippi river from France there was at once inaugurated by the Federal government a series of exploratory expeditions. Of these the first and most important in its results was the Lewis and Clark expedition to the Columbia river. These sturdy explorers, with 43 men. started from St. Louis on the 14th of May, 1804, and ascended the Missouri river to its source. The months of July and August were spent mainly on the western boundaries of present Iowa. In their journal is given the first full account of the features and products of this region ever published. They held many conferences with the Indians. Immediately below the mouth of the Big Sioux river one of the mem-

<sup>&</sup>lt;sup>28</sup>Hist, of Exped. Lewis and Clarke to Sources Missouri River, etc., during years 1804-6, 2 Vols., Philadelphia, 1814.

bers of the expedition, Sergeant Floyd, died; and the place of his burial in Woodbury county, is known to this day as Floyd's bluff.

Speaking of the Big Sioux river, which now forms the northwest boundary of our state, it is stated, "Here began a range of bluffs which continue till near the mouth of the Great Sioux river, three miles beyond Floyd's. This river comes in from the north, and is about 110 yards wide. Mr. Durion, our Sioux interpreter, who is well acquainted with it, says that it is navigable upwards of 200 miles to the falls, and even beyond them; that its sources are near those of the St. Peter's. He also says that below the falls a creek falls in from the eastward, after passing through cliffs of red rock. Of this the Indians make their pipes, and the necessity of procuring that article has introduced a sort of law of nations, by which the banks of the creek are sacred; even tribes at war meet without hostility at these quarries, which possess a right of asylum."

In the following year Major Z. M. Pike made his famous expedition to the headwaters of the Mississippi river.<sup>29</sup> With twenty soldiers, in a keel-boat 70 feet long, he left St. Louis on August 9, 1805. In his journal he gives good descriptions of some of the physical features and of the entire eastern border of our state. The accounts of the Des Moines rapids, near Keokuk, and of the Mines of Spain at Dubuque are especially noteworthy. The rapids are described as follows: "20th August; Tuesday—Arrived at the foot of the rapids De Moyen at 7 o'clock; and, although no soul on board had passed them, we commenced ascending them immediately. Our boat being large and moderately loaded, we found great difficulty. The river all the way through is from 3-4 to a mile wide. The rapids are 11 miles long, with successive ridges and shoals extending from shore to shore. The first has the greatest fall and is the most difficult to ascend. The channel (the bad one) is on the east side in passing the first bars, then passes under the edge of the third; crosses to the west, and ascends on that side, all the way to the Sac village. The shoals continue the whole dis-

<sup>&</sup>lt;sup>23</sup>Account of Expedition to Sources of Mississippi, etc., during 1805-7, 277 pp., Philadelphia, 1810.

tance. \* \* \* The land on both sides of the rapids is hilly, but a rich soil."

During the next decade the Federal government established forts at a number of points on the Mississippi river. Among those of greatest interest to Iowans are Ft. Crawford, on the present site of Prairie du Chien, Ft. Armstrong on Rock Island, Ft. Madison near the present city of that name, and Ft. Edwards at Warsaw, opposite Keokuk.

In 1817 the war department detailed Major Long to inspect these and other forts on the river and to determine sites for other forts. Long's notes are repeatedly referred to by Keating,30 but they remained unpublished for nearly half a century, when Edward Neil secured them from Dr. James, the naturalist who accompanied Long on some of his expeditions. Neil published the account under the title of "Voyage in a Six-Oared Skiff to Falls of St. Anthony." Later it was republished. 31

When Gen. Louis Cass, governor of Michigan territory, returned from an expedition to the headwaters of the Mississippi river in 1820, he with his party went by boat down to the mouth of the Wisconsin river. At this point he left the mineralogist and narrator of the trip, Henry Schoolcraft. The latter spent some weeks in the lead region investigating the mines. This is the first scientific account of these ore-deposits.<sup>32</sup>

An expedition to the Rocky mountains was made by Major Long by way of the Missouri river from St. Louis in 1819.38 The country on both sides of the river is described in some detail. At a point ten or a dozen miles north of the present site of Omaha, on the west side, near high banks called Council Bluffs (not Council Bluffs, Iowa) the party went into winter quarters, Long himself returning to St. Louis, where he remained until the following spring. Then going overland by the straightest lines possible he traversed the southwestern corner of our state to a point opposite the mouth of the Platte river. After leaving the valley of Grand river near the present Iowa border he

<sup>&</sup>lt;sup>30</sup>Narrative of Expedition to Source of St. Peter River, etc., under Maj. Stephen H. Long, 2 volumes, Philadelphia, 1824.

<sup>31</sup>Coll. Hist. Soc. Minnesota, Vol. II, pp. 7-83, 1889.

<sup>&</sup>lt;sup>32</sup>Narrative Journal of Travels through Northwest Region of United States to Sources of Mississippi River, etc., in 1820, Albany, 1821.

<sup>33</sup>Account of Expedition from Pittsburg to Rocky Mountains, performed in years 1819-20 (compiled by Edward James), 2 volumes, and atlas, Philadelphia, 1823.

emerged upon the prairie which he thus describes: "Upon leaving the forest there was an ascent of several miles to the level of a great woodless plain. These vast plains, in which the eye finds no object to rest upon, are first seen with surprise and pleasure, but their great uniformity at length becomes tiresome. The grass was now about a foot high, and as the wind swept over the great plain, it appeared as though we were riding on the unquiet billows of the ocean. The surface is uniformly of that description not inaptly called rolling, and bears a comparison to the waves of an agitated sea. The distant shores and promontories of woodland, with here and there an insular grove, rendered the illusion more complete. Nothing is more difficult than to estimate by the eye the distance of an object seen on these plains."

Long's second expedition<sup>34</sup> to the upper Mississippi region in 1823, reached the great stream at Ft. Armstrong (Rock Island), and proceeded rapidly up that river to the Minnesota river. The account was written by Prof. W. H. Keating, of Pennsylvania University. So far as they relate to Iowa the geographic results are rather barren; although the writer makes some interesting geologic observations.

During the same year an Italian judge in exile, by the name of Beltrami, visited the northern region, passing up the Mississippi river in a steamboat "The Virginia." His notes on the features of the Iowa bank are rather full and of considerable interest.<sup>25</sup>

By an exploratory trip made in 1835 by G. W. Featherston-haugh,<sup>36</sup> in the course of which that traveler passed along the eastern border of Iowa, little new information is added concerning the geographical features of the territory.

The summers of 1835 and 1836 were spent by George Catlin, the famous painter of Indian portraits, in the northwest. Part of this time was passed on Iowa soil. His description of his trip up the Des Moines valley is not without interest. One section in particular is prophetic. "The whole country that we

<sup>&</sup>lt;sup>34</sup>Narrative of Expedition to Sources of St. Peters River, etc., made by Maj. Stephen H. Long, 2 volumes, Philadelphia, 1824.

SPligrimage in Europe and America, leading to Discoveries of Sources of Missispip River, etc., 2 volumes, 1828 (London ed.).

Rept. Geol. Reconnaissance, to Coteau des Prairie, 159 pp., Washington, 1836.

passed over was like a garden, wanting only cultivation, being mostly prairie. Keokuk's village is beautifully located on a large prairie on the bank of the Des Moines river. Dubuque is a small town of about two hundred inhabitants, all built within two years. It is located in the midst of the richest country on the continent. The soil is very productive, and beneath the surface are the great lead mines, the most valuable in the country. I left Rock Island about eleven o'clock, and at half past three I ran my canoe on the pebbly beach of Mas-co-tine Island. This beautiful island is so-called from a band of Indians of that name, who once dwelt upon it, is twenty-five or thirty miles in length, without a habitation on it, or in sight, and throughout its whole extent is one great lonely prairie. It has high banks fronting the river, and extending back as far as I could see, covered with a high and luxuriant growth of grass. The river at this place is nearly a mile wide. I spent two days strolling over the island, shooting prairie-hens and wild fowl for my meals. I found hundreds of graves of the red-men on the island. Sleep on in peace, ve brave fellows, until the white man comes and with sacriligious plowshare turns up your bones from their quiet and beautiful resting place! I returned to Camp Des Moines, musing over the loveliness and solitude of this beautiful prairie land of the West. Who can contemplate without amazement this mighty river eternally rolling its surging, boiling waters ever onward through the great prairie land for more than four thousand miles! I have contemplated the never ending transit of steamers plowing along its mighty current in the future, carrying the commerce of a mighty civilization which shall spring up like magic along its banks and tributaries.

"The steady march of our growing population to this vast garden spot will surely come in surging columns and spread farms, houses, orchards, towns and cities over all these remote wild prairies. Half a century hence the sun is sure to shine upon these countless villages, silvered spires and domes, denoting the march of intellect, and wealth's refinements, in this beautiful and far off solitude of the West, and we may perhaps hear the tinkling of the bells from our graves."

The various reports of the U. S. Army officers who have repeatedly traversed the Iowa territory during the third decade of the last century tend little to extend geographical knowledge. A notable exception is the account of Lieut. Albert Lea.<sup>37</sup> The natural resources are well set forth.

The years 1836 to 1843 were spent by J. N. Nicollet in mapping the Upper Mississippi valley<sup>88</sup> for the Federal government. Nicollet was a French engineer of high scientific and professional attainments. The map is most remarkable in its accuracy and detail. A high authority, Gen. G. K. Warren, expresses the opinion that it is "one of the greatest contributions ever made to American geography."

The subsequent contributions to Iowa geographical knowledge belong properly to the geological surveys.

sinotes on Wisconsin Territory, particularly with reference to the Iowa district, or Black Hawk purchase, Pamphlet, 53 pp., Philadelphia, 1836.

Sign Peport Intended to Illustrate a Map of Hydrographic Basin of Upper Mississippi River: Twenty-sixth Cong., 2nd Sess., Sen. Doc. 237.