

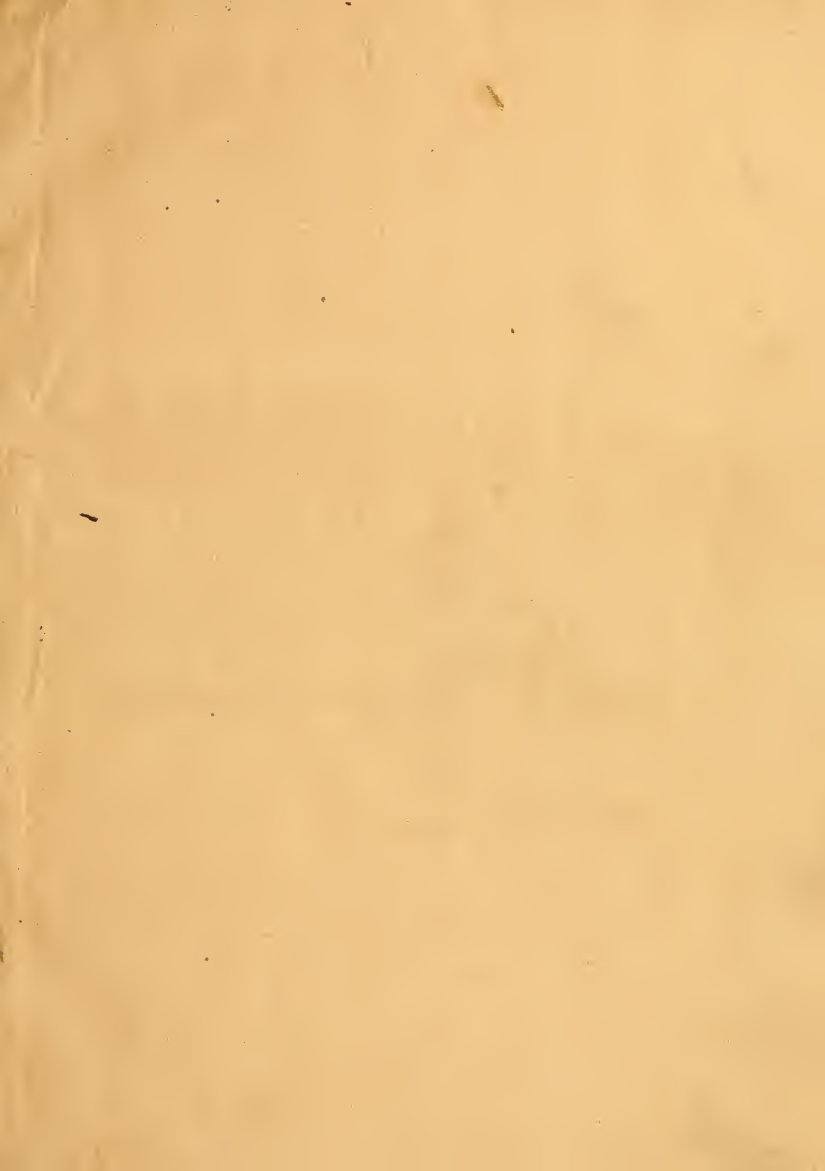
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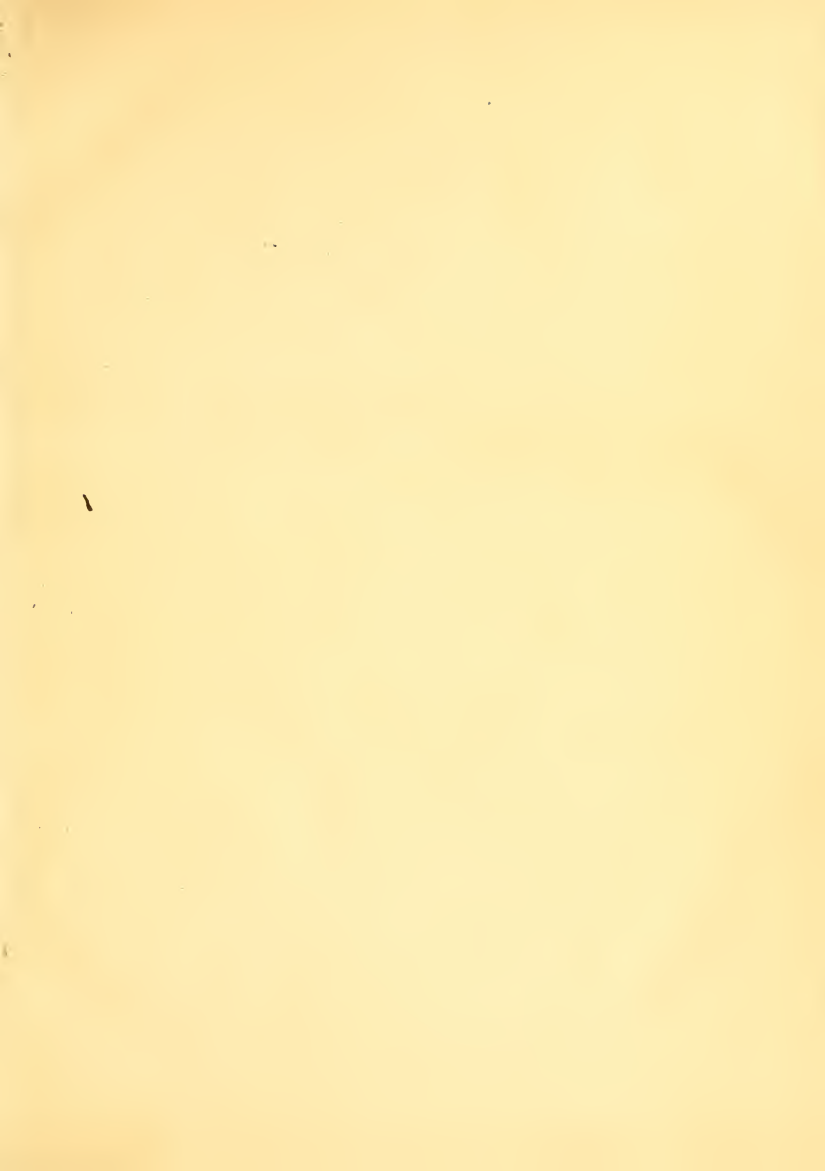
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# A JOURNEY

IN

## NORTH AMERICA,

*in 1796*

CONTAINING

A SURVEY OF THE COUNTRIES WATERED BY THE MISSISSIPPI, OHIO, MISSOURI,  
AND OTHER AFFLUING RIVERS;  
WITH EXACT OBSERVATIONS ON THE COURSE AND SOUNDINGS OF THESE  
RIVERS; AND ON THE TOWNS, VILLAGES, HAMLETS AND FARMS  
OF THAT PART OF THE NEW-WORLD;  
FOLLOWED BY PHILOSOPHICAL, POLITICAL, MILITARY AND COMMERCIAL  
REMARKS  
AND BY A PROJECTED LINE OF FRONTIERS AND GENERAL LIMITS,

Illustrated

BY 36 MAPS, PLANS, VIEWS AND DIVERS CUTS

*Georges Henri*

BY VICTOR COLLOT,

Late General in the French service, and Governor of Guadeloupe.

PARIS,

PRINTED FOR ARTHUS BERTRAND, BOOKSELLER,

N° 23, RUE HAUTEFEUILLE.

1826.

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# PREFACE

## OF THE EDITOR.

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THE author of the work we offer at present to the Public served during the first American war in the staff of the French army, under the command of Marshal Rochambeau.

Though still young at that time, he reflected on the high importance of geographical inquiries respecting that part of the American continent to the trade and policy of the European Powers. He felt a strong wish to undertake those inquiries which he would immediately have made, had not particular circumstances opposed his purpose.

Named Governor of Guadeloupe, General Collot administer'd that colony until its capture by the English. He then fell himself in their hands, and was sent to the United States.

Scarcely had he arrived in Philadelphia, when he was arrested at the suit of a merchant of that city, for having, during his administration at Guadeloupe, confirmed the sentence of the *Conseil des prises*, condemning a vessel which belonged to the American merchant. He was forced to give bail, and to promise on his honor to remain in the country, in case his presence might be necessary before the courts of law.

To beguile the hardship of his position, M. Collot wished to employ the time of his banishment in a manner useful to his country, and in consequence he resumed his former project of travelling in the interior of North America.

Adjutant general Warin, an officer of high merit, who had served under his orders and ac-

accompanied him to the United States, joined him in his enterprise. The Work we publish is the result of their labours, which cost the unfortunate companion of the General his life.

As soon as general Collot returned to France, he set down to digest the notes he had taken. The Work was written and printed in French and in English, a translation in the latter language having been carefully made by an Englishman, under the eyes of the General himself. The maps and views, 38 in number, were engraved when death surprized the author.

The whole edition has lately been sold by the notary of the Estate, and the bookseller who purchased it reserved no more than 300 copies in French, and 100 in English. All the rest have been destroyed in a view to give more value to this important Work.

The Editor cannot help acknowledging that some things are altered in America since the time

this Journey was written; but whatever concerns the topography of this country and the course of the rivers has remained the same. It is that which the editor flatters himself will long give interest to the present work, and render valuable in the eyes of the Public the observations of so judicious a Traveller.



## INTRODUCTION.



M. ADET, Minister Plenipotentiary from France to the United States, having proposed to me to furnish him with a minute detail of the political, commercial, and military state of the western part of that continent, I determined to undertake an expedition, which might procure to the French Republic a portion at least of such information, as the Minister was desirous of obtaining. I did not deceive myself respecting the difficulties, and even the dangers, of the journey; but at a distance from the theatre where I might have encountered perils as a soldier in the service of my country, I found pleasure in undertaking a task, which, though laborious, was useful, and expressed my warmest gratitude to the minister for the choice, which afforded me an opportunity so auspicious to my wishes.

It must be acknowledged, that England holds a great superiority over us in every thing which relates to the

discovery of remote countries. In England, the government, the learned societies, and private associations, are continually employed in sending out, at their own expense, well-informed men, for the purpose of increasing the mass of this kind of knowledge, which is peculiar to that nation. The natural propensity of the English for distant expeditions furnishes the government and those societies with ample means of accomplishing this honorable and important purpose; and the extension and prodigious activity of English commerce gives an extraordinary facility to such enterprises. Almost the whole of the globe has been visited within the last twenty years by the English; whilst under the old French government, the nation, buried in apathy, remained an idle spectator of the toils of English travellers. The nature of that government, the ideas and habits which resulted from its administration, left in a state of supineness that industry and activity which it was so easy to animate; and we obtained from translations only that knowledge which English travellers gathered at the very source. Our shameful indifference concurred, in this manner, to foster in the mind of the English the persuasion of their superiority over us; a sentiment which they have not failed to propagate, wherever they have acquired any influence.

Among the various countries concerning which the old French government were interested in gaining the most certain information, North America holds the first rank. To have contributed so powerfully to the independence of the United States, and to have torn them from England, was undoubtedly a great enterprise; but a knowledge of their resources, of the means of making them contribute to our own advantage, of their political and geographical situation, as well as more detailed information of the countries by which they were surrounded, was necessary in order to make ourselves intimately acquainted with the means of assisting the United States, if they remained our allies, or of menacing their tranquillity if they joined our enemies. America seems destined to act a brilliant part, some years hence, in the political balance of Europe. Our enemies and friends possess immense territories in these regions; and it is only by topographical knowledge that governments can be enlightened with respect to concessions, conventions, and demands, which, though apparently indifferent at present, may, nevertheless, at a future period, determine the pre-eminence or inferiority of our nation, of our allies, or of our enemies, in that interesting part of the world. The English, in consequence of their taste for travelling, the ambitious views of their government, and their extend-

ed commerce, particularly in the fur trade, have enriched themselves with a considerable portion of essential information, which had hitherto been concealed. Such, for instance, was the journey of Mackenzie, in 1794, when he penetrated to the Pacific Ocean across the western deserts; whilst a few memorials of Jesuits, or other missionaries, written more than sixty years since, are the only monuments which France can produce of its labors and its researches into Northern America. Let us not, however, admit a doubt that France, awakened to the spirit of liberty, will, by a natural consequence, be animated also to every undertaking which can contribute to the happiness and glory of the nation. Let us cherish the persuasion that the government, anxious to take advantage of that intelligence, activity, and patriotism, which no other nation possesses in so eminent a degree, will cultivate this important branch of knowledge; and that France, which from an ardent love of liberty, has, by its courage and intrepidity, filled the whole world with the fame of its victories, will assume also the first rank in every department of science, of learning, and of enterprise, which can add to its prosperity, and contribute to the extension of its intellectual attainments.

In the account which I had to render of my mission, it appeared to me that the most simple mode was the best. I have therefore classed, in a regular manner, the different objects which I saw during a journey of ten months. I shall make no apologies for inaccuracies of style; I have no pretension to the character of a literary man, nor have I been in the habit of writing; but I can assert with confidence, that the most unwearied attention, the most persevering labors, have not been spared, in order to obtain every kind of information; and that, in the narrative I am about to offer, I have preserved the most scrupulous veracity. I should have considered myself as unworthy of being entrusted with so important a mission, had I on any occasion swerved from the rigor of truth.



PHILADELPHIA,  
24th Ventose, 4th year of the French Republic,  
One and Indivisible.

The Minister Plenipotentiary of the French Republic at the  
United States, to the Citizen VICTOR COLLOT, General of  
Brigade.

“ CITIZEN,

“ Considering your services as useful to the  
“ Republic, I inform you, that it is my intention to employ  
“ you in your quality of General of Brigade during the period  
“ of the mission which I purpose to confide to you, or until  
“ the Executive Directory has otherwise ordered.”



## *PRELIMINARY DESCRIPTION;*

OR SKETCH OF THE GENERAL OUTLINE OF NORTH AMERICA,  
AND OF THE COUNTRY WHICH FORMS THE PLAIN OF  
THE MISSISSIPPI.



THE two great chains of mountains which bound and traverse the continent of America, and which are called the Alleghanies and the Cordeleras, are the continuation of those lofty heights, which, after traversing South America, form, one the isthmus of Panama, the other the chain of the Antilles. These mountains lose themselves at the north and east of North America; the Cordeleras at the point discovered by Mackenzie towards the sixty-first degree of northern latitude; the Alleghanies at Niagara, where the river St. Lawrence pierces its bed of granite, and forms the celebrated cataract which bears its name.

These are the only two chains of mountains in the continent of America, which, from their elevation, their nature, and their vast extent, can be classed under the

name of primitive mountains; the rest are only secondary, or of the third order, which, branching out in different directions, form lower ranges of hills or promontories.\*

These two chains of mountains run nearly at equal distances; the one from the coasts of the Southern Ocean, the other from those of the Northern. The space, which separates those mountains in North America, is a vast plain, watered by the Mississipi, and by the rivers tributary to this stream; which may be distinguished by

\* The following characteristics distinguish these two classes of mountains: the primitive mountains traverse a vast extent of country, without varying in their general direction; they never disappear, and are connected together, unless broken by great objects, such as the sea: the secondary mountains, on the contrary, occupy less space in the same track, extend themselves in various directions, and are either insulated, grouped, or scattered. When it happens that the primitive mountains are composed of several ranges, these ranges run always parallel to each other; unlike secondary mountains, which often form lines that are infinitely varied, and angles of different degrees. The summits of the primitive mountains are seldom or never covered with wood; and, when they are thus clothed, it is only by one kind, which is resinous wood, such as pines or cedars: the secondary mountains, on the contrary, are well covered from their summit to their base, and with wood of every kind. The primitive mountains are very unequal in their elevation, and are jagged at the tops; whilst the others are generally smooth, round, or flattened, and appear to the eye as if they were festooned or cylindrical. On the whole, it is the secondary mountains alone

the names of the waters of Mexico and the plain of the Mississippi.

The Alleghanies divide the waters of the Atlantic from those of the Mississippi; the Cordeleras, those of the Mississippi from the Pacific Ocean. The Mississippi may, therefore, be considered as the great artery of the northern continent of America; the rivers of which take their source, some at the east in the Alleghanies, the others at the west in the Cordeleras; and which, after traversing almost every temperate latitude, throw themselves into the gulf of Mexico, which forms the grand receptacle.

Independently of this general division of the waters, there are also important subdivisions, formed by secondary mountains, or elevated plains. The plateau, elevated plain\*(A), one of the most remarkable, (See the map, No.I.)

which form the vallies, the undulations, the elevated plains, the falls, and the rapids. The difference in their substance is also striking. See on this subject, Kirwan, Ramond, Dolomieu, etc.

\* This plateau, as far as respects military objects, is, perhaps, the first on the globe: it is a block of granite without mountains, commanding, on every part of its circumference, an immense distance; situated precisely on the extremity of the natural and probable frontier of the English, Spanish, and American possessions. Hitherto it is a region belonging to no state; but the power, into whose hands it falls, will incontestably possess the key of all the waters of this vast plain.

divides the waters of the river of St. Lawrence, of Hudson's Bay, and of the Mississippi, from those which throw themselves into the Pacific Ocean and the Icy Sea. This immense plain, which reaches from the twenty-ninth to the forty-first degree, (where are supposed to be the sources of the Missouri,) is covered with forests, natural meadows, lakes, rivers, streams, and falls of water.

The forests of this plain bear no resemblance to those of the northern and eastern parts of America, the greater part of which forests are thick and humid, impervious to the beams of the sun, and through which the air scarcely circulates. Those, on the contrary, which cover the lands watered by the Ohio, the Mississippi, the Red River; those of St. Francis, the Arkansas, of the Grand Osages, and all the western part of the Mississippi, are composed of lofty trees, clear, without brushwood, open to the sun, and to the free circulation of the air. It is observed, also, that the height, the size, and the quality of the wood, are very superior to that which grows towards the north and east.

Barren and gravelly veins of earth, called by the Canadians *pays de misère*, are sometimes found on elevated spots: this soil is thinly covered with a kind of brushwood, resembling young shoots of two years

growth. Such spots are not very frequent, and seldom occupy much space.

These immense forests are often intersected by natural meadows, the extent of which can scarcely be measured by the eye, and is sometimes so vast that they seem to blend with the horizon. There are two kinds of those meadows, that of the vallies and that of the heights. The meadows of the vallies are situated in low grounds, and on the banks of great rivers; the most extensive are those which line the borders of the great Osages, of the Arkansas, the Missouri, and the right side of the Mississippi, from the fall of St. Anthony to the mouth of the Missouri. The soil of the meadows of the vallies is chiefly formed of earth washed down from the hills, and is in general extremely fertile. These meadows are covered with medicinal plants and herbs of endless variety; some of these plants are nearly twenty feet high: these meadows are without trees; which, however, does not arise from the nature of the soil, since it is well known that, if planted, they would grow with extreme rapidity.

The meadows on the heights, particularly those to the north of the Missouri, are composed of a light and gravelly soil, impregnated often with metallic and sulphurous substances, brought down probably from the

Cordeleras. What leads to this conjecture is the observation, that the nearer you approach these mountains, the forests are more thinly scattered, the wood is clearer, the trees smaller, and the meadows on the heights more numerous, so that towards the Madane,\* very few trees are seen.

These meadows are covered with herbs of smaller growth, and less abundant than those which grow in the vallies; they are also more aromatic. Sometimes they are intercepted by tufts of wood composed of small oaks, black and stunted, called by the Americans *post oak*. These meadows occupy a plain surface, but less extensive than the former.

On the right side of the Missouri, at the west or south west, there are meadows of so extraordinary a nature, that they belong to neither of the other classes. The soil through which run the rivers Plata and Qui court, is composed of a mass of pure marl, which is covered only by a coat of very fine sand, and on which scarcely any traces of vegetation are to be seen. This marl is easily diluted, if we may judge from the waters of those rivers, which are white as milk; a tint which they pre-

\* An Indian nation dwelling on the Missouri.—See the Chart, and the chapter Missouri.

serve during the whole of their course, and which they communicate to the Missouri.

Towards the south-west, between the sources of the river of the Arkansas and those of the great Osages, the whole soil is sprinkled with a powder of efflorescent salt, which is continually penetrating across the pores of the earth, and which, from its extreme divisibility, is almost impalpable.\* Here and there a small fine grass may be sometimes perceived starting through this dust, not unlike that which grows on our downs, but shorter. The mountains which border this valley are composed of a fossil salt, pure and hard as a rock. Their summits, on the northern side only, are covered with a brown and duskish crust, which the inclemency of the seasons appears to have imprinted: the opposite sides and the flanks of these mountains are white, and brilliant as chrystal. The waters of the river of the Arkansas, which in some places perforate veins of these pillars of salt, are impregnated with this mineral like those of the sea. At their source they are of the finest blue; and it is only after running some hundreds of miles that they grow turbid,

\*It is probable that this efflorescent salt is a carbonate of potash, of a nature analogous to the natrum of Egypt, the result of that kind of decomposition of sea salt by clay, and which was discovered by M. Guyton Morveau.

take a yellowish tint, and become fit to drink; preserving, however, a brackish taste, till they fall in with the waters of the Mississippi.

This valley is filled with a multitude of animals, attracted by the salt: whole droves of every kind are seen peaceably roving, nor does it appear that the strongest take any advantage of their power over those which are weaker. Nature displays in this valley the most stupendous aspect of rude magnificence, the contemplation of which excites the most singular emotions.

These mountains are formed by pillars of salt heaped on each other: these pillars are pyramidical; some are scattered, others remain in groups, but all thrown together in such confusion that they seem to have been the sport of tempests. The variety of brown, black, and luminously white colors, the splendor of which is redoubled by the rays of the sun; the groups of animals embellished at a distance by the reflection of the light on the white and shining dust which covers this vast plain; the lowing of those savage herds, joined to the noise of the torrents which rush from the mountains; the desolating nakedness and total absence of all vegetation, as if nature had disdained in this region to clothe the earth; the turbid and tinted waters of the different rivers which rush along this valley, and, by the rapidity

of their course seem anxious to escape from abodes to which they can give neither life nor beauty; to these objects if we add the various optical illusions which take place, the effects of light and shade of the morning and evening, we may form some idea of the changing scenes which these mountains present—scenes which it is impossible to describe, but which leave on the mind impressions of melancholy and sublimity that can never be effaced. These mountains are called by the Indians *Enchanted Mountains*, and by the Canadians *Shining Mountains*. A chain of heights branches off from these masses of salt, and after having changed its nature, takes its direction towards the South, crosses a part of New Mexico and New Leon, and separates the waters of the river Mississippi from those which throw themselves into the river Rio Bravo.\*

Nature in the plains of the Mississippi has not been less lavish in the formation of lakes than in that of meadows and forests; their number and extent are prodigious; they are also extremely dissimilar. The lakes of the plains and the salt lakes have features that are entirely distinct.

\* Those heights are the natural limits which will one day separate Louisiana from New Mexico.

The lakes of the plains are found in sunken hills, or in vallies surrounded by secondary mountains, in which the waters are collected, till rising to a certain height they open a passage on the side of those which are the least elevated, and from thence generally form streams or rivers, of which these lakes may be considered as the reservoirs. The disorder which prevails in the distribution of the secondary mountains is such, that they are often linked together, often insulated, and sometimes form a continued chain of lakes. Such are the lakes Superior, Michigan, Huron, Erie, and Ontario; which lakes, after communicating their waters to each other by natural canals or straits, give birth to the river St. Lawrence. The Slave and Athabasca Lakes mingle their waters and form Slave River, which loses itself in the Icy Sea.

Bear Lake alone forms the primitive source of the Mississippi, which is augmented at some distance by the waters which flow from several other small lakes that are adjoining, but distinct from each other.

The Western river, lately discovered, and which throws itself into the Southern Ocean, towards the forty-fourth degree of latitude, takes its rise also from lake Organ alone.

The communication of lake Superior with Rainy lake\* is partly formed by a cluster of small lakes strung, as it were, together like beads; sometimes connected, and sometimes at small distances from each other.

But though the lakes seem dispersed in this plain, their common centre is the Plateau, or elevated plain (A), whence they all take their rise. It is from this centre that they pursue their different directions to the north, the south, the east, and west; and, after forming internal navigations which have no parallel, communicate with the Icy Sea, Hudson's Bay, the gulf of St. Lawrence, and the gulf of Mexico. §

Whether these lakes were the work of the sea, when parts of the continent were successively buried under its waters; or whether they were produced by some extraordinary commotion of the earth, which formed abysses of elevated plains; it is certain, that one of the indispen-

\* See the chapter on the Fur Trade, at the end of this book.

§ The communication of these waters with the Icy Sea is formed by the lakes Winnipic, Athabasca, the Slave lake, and Slave river; with the gulf of St. Lawrence, by the lakes Superior, Huron, Erie, Ontario, and the river St. Lawrence; with Hudson's Bay, by the rivers Severn, Nelson, and Churchill, which take their sources from the Slave lake and from the lake of Athabasca; and lastly with the gulf of Mexico, by the river Mississippi.

sable requisites for the preservation of these lakes in their present form, extent, and depth, is that the rivers which empty themselves into these reservoirs be pure and limpid; since were this not the case, they would soon be choaked up by the sand, or earth, brought down by the waters; it is, however, to be remarked, that their waters are clear, and that the rivers which flow into them are, from their very sources, of the same nature. From these observations it necessarily results, that the beds of these lakes are of rock or gravel, and that the soil of all the lands around them, as well as of the plateau (A), is composed of the same substances.

The salt lakes are generally found in the midst of alluvions, near coasts that are low and sandy, and in the proximity of the mouths of rivers which flow gently, and are subject to inundations. These waters, escaping by channels, or filtering through the sands, and not having sufficient force to overcome the obstacles which they meet from the sea-breakers, flow back and form inland basins.

When the current of these rivers is very rapid, the breakers give rise only to bars;\* but if, on the contrary,

\* As may be seen at the chief outlet of the Mississippi, of the Amazons, and the Oronooko.

the current be slow, flowing from small branches of rivers, then the sea, breaking continually on these bars, and adding new matter, at length forms banks, which dividing from the sea the waters that its waves have driven back, leave a greater or less volume between the banks and the old ground. It is in this manner that the lakes Borgnes, Barataria, Maurepas, Pontchartrain, and all small lakes in general, are formed.

The lakes Borgnes, Maurepas, and Pontchartrain, which intermingle their waters, are formed by the current of the river Amit, and by a small branch of the Mississippi; but the waters of the Mississippi flow only in times of inundation, and when a part escapes by the channel of Ibberville.\*

The waters of the river Amit communicate the whole year with those of the lakes; the Mississippi only for three months; those of the Amit are clear; the waters of the Mississippi, on the contrary, are muddy. When this river mingles, the lake becomes muddy also; but when it subsides, the lake regains its limpidity. Were there not this difference between the waters of the Mississippi and the river Amit, which last is employed to clear away in twelve months what the former has deposited during

\* See the description of this river.

three, these lakes would at length be choaked up. It is, nevertheless, observable, that they diminish insensibly in depth, and form every year new bays and new banks, which render the navigation uncertain and difficult.

The lake Barataria, which is insulated and formed only by the waters of the Mississippi when they are periodically introduced by the forks of the Chetimacha, has lost more than a third of its diameter, and at least half its depth. It is only from this circumstance of the three months inundation that it remains still a lake, and that it is not already become a morass.

The bed of those lakes is mud, and the soil which surrounds them is commonly sandy or marshy; in comparing, therefore, the opposite qualities of the lakes of the plains and salt lakes, we find that the first are situated near the sources of rivers, and the latter near their mouths; that the one serve as reservoirs to rivers, and the others only as sewers; that the waters of the lakes of plains are clear and limpid, and that those of salt lakes are almost always turbid; that the bed of salt lakes is mud, and the navigation often dangerous; that the bed of the lakes of plains is either rock or gravel, and the navigation always safe; upon the whole, that every thing concurs to the preservation of the one, and the destruction of the other.

From the disparity between these two kinds of lakes, the following consequences result:—That whatever undertakings may be formed to render the salt lakes of advantage to commerce and home navigation, either by means of artificial canals to connect their waters with those of rivers or the sea, or by other works to counteract the effect of depôts which are daily forming in a greater or less degree, such enterprises can have only a momentary success, which will turn sooner or later to the disgrace of those who shall have formed the plan, and the detriment of those who furnish the costs; whilst, on the contrary, if views of public utility were turned towards the lakes of the plains, by plans well combined and wisely directed, nothing could prevent the governments which undertake such enterprises from reaping the most solid advantages, as well in military as commercial points of view. Some exceptions may no doubt be made to this general principle; but if any such exist, they are rare, and we may be assured in such instances that, strictly speaking, the premises are not the same.

No rivers in any part of Europe are of so great an extent as those in America, where they frequently take their source in the Cordeleras, and empty their waters into the Atlantic; and where, excepting the narrow space which separates the Cordeleras from the Pacific Ocean,

they traverse the whole continent from west to east. In the elevation of these mountains, so superior to that of the Alleghanies, and in their geographical situation, we must look for the causes of these mighty rivers; since the prodigious height of these mountains make the land incline necessarily towards the east. If we have formed a just idea of the north western coast from the different descriptions which have been given us,\* and the well-known direction of the Cordeleras, running always parallel with the coast at the distance of one hundred and sixty leagues, we may attribute to the same cause our persuasion, that there can be no great rivers which throw their waters into the Pacific Ocean, since such rivers must necessarily pierce through these mountains. The course of the most extensive rivers on this coast, so long as their nature remains the same, cannot be more than the distance which exists between the Cordeleras and the Pacific Ocean. All those vast openings, therefore,

\* In the description which has lately been published in the journals of Lapeyrouse and Vancouver, this coast is represented as extremely high and perpendicular, having always a great depth of water, often masked by groups of great islets well covered with wood, and the land behind these coasts rising gradually till the horizon is bounded by a long chain of mountains.

seen along the coast by Lapeyrouse and other celebrated navigators, and which seem to have left doubts on this subject, are no other than the entrance of bays, roads, or ports, formed by the waters of the sea, and sheltered by the clusters of wooded islands, with which this coast is lined, and which receive, like all other bays or ports that are known, rivers of the second order. The river lately discovered by Mr. Mackenzie, and running north-west, does not destroy this opinion, because we already know that it takes its source only in the Yellow Mountain, and that consequently it can have but a very limited course: we also know that its course is interrupted by a multitude of rapids, like those of the Slave and Coppermine rivers. It must be observed too, that the coast may, perhaps, change; and it is even probable, that after passing the fiftieth degree of latitude, it flattens, and that the Cordeleras, varying their direction, incline more towards the east, become less connected, and form groups, like the Alleghanies at Niagara, after passing the forty-third degree. Upon the whole, we must again repeat that those rivers running to the west and the north, cannot have their point of departure more distant than the elevated plain (A), which we have already described as the divisionary point marked out by nature in North America for the distribution of its waters, being its most elevated

spot, and in which plain the rivers necessarily take their source.

But independently of the consideration that the extent of these rivers is comparatively limited with that of the great rivers coming from the west,\* the navigation of the former can never be of any great utility, since it is easy to foresee that their beds must be intercepted by falls and rapids, as their waters cannot penetrate to the Pacific Ocean, without piercing some scattered branches of the Cordeleras or promontories; in the same manner as the waters which throw themselves into the Atlantic, from the Floridas to the river St. Lawrence, are forced to pierce the Alleganies.

The rivers situated on the west of the Mississippi alone traverse immense spaces with uninterrupted course, their waters having none of the great obstacles of nature to encounter; since on the one side they escape from the Cordeleras, and, by throwing themselves into the gulf of Mexico, avoid on the other the Alleganies, which, as

\* From White Bear Lake, where the Mississippi takes its source, to the mouth of this river, is four thousand miles, taking in all its bendings. The Missouri throws itself into the Mississippi at about two thousand miles distance from the mouth of this river, and two thousand five hundred miles have already been explored without meeting either falls or rapids; which makes four thousand five hundred miles already known.

we have already observed, have here ceased following the coast, to form the chain of the Antilles.

The difference which is observable between the rivers coming from the west, the waters of which empty themselves into the gulf of Mexico; and those which in North America throw themselves into the Atlantic, in which there are neither falls nor rapids,\* whilst the streams to the east of the Mississippi are filled with both: the immense plain which these waters traverse without any other obstacles than secondary mountains or hills, which they perforate or divide, and of which they are continually diminishing the mass: the soil of sand or clay, which they alternately wash and dissolve; the rapidity of their currents, compared with that of the rivers on the east, interrupted either by falls or rapids; the wrecks of sand, mud, and wood, which the western floods precipitate towards the sea in the season of their inundations, which are so extended and so frequent: the quantity of alluvions§

\* As these rivers are interrupted by neither falls nor rapids, except towards their sources, they have very swift currents; notwithstanding this favorable circumstance for the speedy emptying of the waters in the season of inundations, they rise in some places an hundred feet; what would be the effect if these rivers were as smooth as those of the east?

§ In no other part are alluvions found so considerable and frequent as those which are formed by the rivers of the east. At the mouths of the

that are found at the mouth of all these great rivers, which are the result of depôts accumulated every year towards the gulf, and thereby diminishing its basin; the salt lakes which are imperceptibly filling up, the void of which, left by the waters, is successively changed into morass, and afterwards into solid ground; the Allegany mountains, in short, which, instead of following the turn of the coast, suddenly break off to gain the point of the Floridas: all these circumstances combined are well calculated to excite

Mississippi and the Amazons there are some which extend from thirty to forty leagues. The reason is, that these rivers traverse a much greater space than any in Europe. In the rapidity of their course they wash away and dissolve different substances. These wrecks are carried down from one river to another, till they reach the sea. The heavy, sandy, and mineral parts sink to the bottom; but the calcarious and argillaceous earths mingling with the waters in their current, detach themselves as soon as the river becomes more tranquil, sometimes on one side, sometimes on the other, and form an alluvion, a bank, or an island, composed at first only of thick and moving particles;\* but after a certain time, these alluvions, by the action of the sun, acquire consistency and solidity. Each inundation adds a new layer, till the alluvions attain such an elevation that the waters can no longer reach them. Plants, and at length trees, spread themselves over these new lands, where they grow and perish; and their destruction forms a vegetable crust upon the surface, of a richness and fertility unknown in the old world.

\* See the description of these quicksands in the chapter on the Missouri.

doubts respecting the system so often published, but never clearly proved, that “the Antilles formerly made part of “the continent of America,” and leave room, on the contrary, to conjecture that they may be tending to form that junction. The same doubts are applicable to the islands in the Southern Ocean, which may also become the foundations of other new continents. But I shall not here attempt the examination of the first of these questions, which is worthy of fixing the attention of the most celebrated geologists; my abode also in the Antilles during most stormy periods of the révolution, was too short to have admitted of such investigation. It is not in the midst of poignards that objects of this nature become fit subjects of meditation.\*

\* I was governor at Guadaloupe in 1795 and 1794, without money, without marine, without soldiers, and without laws.



## CHAPTER I.

*Departure from Philadelphia.—Military and Topographical Description of the Alleghanies.—Defiles or Gaps.—Observation on the Insurrection of 1794.*

ON the twenty-first of March, 1796, Adjutant-General Warin and myself left Philadelphia. After fourteen days march, and halting twice, we reached a new establishment called M'Kees's Port, situated on the Monongahela. Several reasons decided us to take this route in preference to the road which leads directly by Pittsburgh. We were desirous of acquiring a detailed knowledge of the river Monongahela, which we considered as one of the sources of the Ohio; and we had been informed in our route, that we should find no boat at Pittsburgh fit for our voyage, since it is only on the Monongahela that they are built; and also that we should much more easily equip ourselves on this river than on any other. We had reason

to be satisfied with this information, which if we had not followed, we should have been greatly retarded, and our expenses increased a third.

The road which leads from Philadelphia to Pittsburgh is too well known to render any long details necessary. The Alleghanies alone excited our attention, as they are destined, at some future period, to become the limits of the western states, and those of the Atlantic.

The Alleghanies, properly so called, are formed of many chains of mountains running parallel to each other, nearly from north east to south west, and are divided into secondary and primitive mountains. The secondary are the first which present themselves to the eye of the traveller, in coming from the coast; the distance of these mountains from the sea is from one hundred and sixty to one hundred and eighty and two hundred miles, but never more. This space of ground is called *flat* or *plain*, and forms, as it were, the glacis of the secondary mountains, extending as far as the ocean.

These mountains are composed of three principal and distinct ranges, running each in the same direction, and always parallel to each other at greater or less distances; leaving in their intervals small vallies, the most extensive of which is not more than eight or ten miles broad, and the narrowest from three to four. The denomination of

these mountains changes according to the States which they traverse. The two first ranges are not very lofty; the third is more elevated, but sinks often beneath the soil, and becomes again perceptible in North Carolina towards the thirty-fifth degree of latitude, where it is known under the name of the Blue Ridge. The secondary mountains are generally granitous, at least from Niagara to the Floridas.

The most remarkable of the different vallies which form these ranges is the third, that of Shenandoah; it takes its rise at Hudson's River, and is found the same in Georgia and the Floridas. This valley separates the secondary from the primitive mountains, and a part is watered by the river Shenandoah, which throws itself into the Potomac a little below Shepherd's-town. Its average breadth may be about twenty miles.

After crossing those different lines of vallies, and secondary mountains, we reached the primitive mountains or principal chain of that part of North America; this chain consists of different parallel ranges, called the Apalachian or Allegany mountains.

The first range of the Alleganies is called Northern or Blue Mountains; it is divided into different branches; in the west it is known under the name of Apalachian, in the north by that of Allegany.

The Alleghanies, properly so called, are covered with a kind of grindstone, which is found upon the Ohio, and as far as the country of the Illinois; this is the loftiest chain; several rivers spring from its sides, and it is the only chain that is not pierced by any river.

Next to the Alleghanies are three other distinct ranges of less elevation; these are Fidelings Hill, Laurel Hills, and Chesnut Ridge; this is the last range on the western side, and makes part of the primitive mountains. The distance from this mountain to the Ohio is only forty or forty-five miles; it is also at this point that the great division of the waters takes place, which run into the gulf of Mexico and the Atlantic Ocean; this mountain is nevertheless pierced by a few great rivers, which take their source in the Alleghanies.

After passing this last range, the nature of the soil evidently changes; it becomes more loamy, browner, less gravelly, and the vegetation is stronger than on the eastern side.

Independently of these mountains, there are vast elevated plains. One of considerable extent lies on the north of the whole range of these mountains, which takes up the interval between the sources of the Mohawk river and the Niagara; its direction is to the west.

From this elevated plain spring the Allegany, Susquehannah, and Mohawk rivers, whilst it divides the waters of these different rivers from those that run into the lakes Erie and Ontario. In this region the mountains entirely disappear, and are perceptible only on the other side of the Niagara.

As the greater part of the large rivers which traverse the Atlantic States, take their source in the primitive mountains, and run almost all from north-west to south-east, they are forced to pierce the secondary mountains at right angles, which forms scissures or defiles, called gaps. In the state of Pennsylvania there are three of these gaps, through which every thing passes which comes from the east and the centre, to reach the States in the west. The first is the most northerly at Cassady, on the Frankstown, (a branch of Juniata river) where all the roads meet that lead from Northumberland to the carrying-place at the sources of the Conomaugh river, the waters of which throw themselves into those of the Allegany, and from thence into the Ohio. The second is at Yellow Creek, through which lies the road which leads from Huntingdon to Bedford. The third is at Hartley's, at the passage made by the Juniata, and a little behind the point where meet all the roads coming from

the lower part of Pennsylvania, and which afterwards form only one great road as far as Bedford.

There is indeed a fourth, but this is situated at Cumberland, in the Potomac, very near the frontier line of Pennsylvania, and serves to convey whatever comes from Maryland and Virginia. These four defiles are, as we have already observed, breaches made by the waters, which have opened to themselves passages across the secondary mountains. The largest of these defiles is not more than one hundred and twenty fathoms from the foot of one cliff to another, comprehending the breadth of the river.\*

The spaces between these defiles, from Cassady, on the left of this position, to Cumberland, on the right, are, during the length of sixty miles, crossed by no road; nor is it possible to construct any before an enemy, on account of the steepness of the mountains, and the masses of rocks with which they are covered. In order to cross the Alleghanies with any other troops than light infantry, these defiles must be forced.

Had the chiefs of the insurrection in 1794 been soldiers, or had they possessed any military knowledge of these mountains, they might, with the troops under their

\* See the Chart of the Ohio.

orders,\* have blocked up the passage of the Alleghanies against the federal army, by seizing on these defiles, and stationing their principal force at Bedford. Pittsburgh became naturally their place of depôt; by this manœuvre they might for a long while have assured their subsistence; perhaps determined the inhabitants between the Alleghanies and the Susquehannah to take an active part in their resistance, and have embarrassed, for a considerable time, the federalists. Happily, this insurrection, which, had it been prolonged, would probably have caused an unnecessary effusion of blood, was speedily terminated; and I consider it as my duty to add, that from all the information which I could obtain during three weeks residence in this country, which was the real theatre of the insurrection, I am persuaded that the Minister Fauchet had no concern whatever in these disturbances; although the enemies of France have been eager to throw on him an ample share of blame.

\* They had more than eight thousand men at their disposal, all excellent light infantry.



## CHAPTER II.

*Monongahela.—New establishments formed on that river.—Kind of boat used in going down the Ohio.—Proportion of boats with keels.—Price of lands.—Allegany river.*

THE Monongahela is in general bordered by mountains of considerable height, leaving so narrow a space along the banks of the river, that during its whole course, there is very little of what is called flat, or low ground, fit for pasture. As these mountains are almost perpendicular, it will be long before any attempts are made to clear them; since it is only at their extremities, their base and their summit, that they are inhabited or cultivated. The quality of the low lands is good, though light and sandy; but they cannot be considered as lands of the first class, the vegetable earth being but six inches in depth, spread over a pure yellow sand. The layer of earth in the high

lands is not three inches in depth; the soil is also extremely light; and from the mode in which it is cultivated by the Americans, this land will be exhausted in twenty years. The most common trees are the oak, the chesnut, and the maple; they present nothing extraordinary either in size or elevation. The breadth of the Monongahela is from six hundred to six hundred and fifty feet; the river runs over a bed of yellow sand, mixed with an earth of nearly the same color, which renders it generally turbid. Its current is slow and gentle, carrying a boat without sails or oars about a mile and an half an hour; it is easy of ascent, and is navigable above a new establishment, called *New Geneva*, nearly eighty miles from Pittsburg: this space is uninterrupted either by cataracts, falls, or rapids.

The banks of the Monongahela are almost every where inhabited; there are six establishments which bear the name of towns or ports; *New Geneva*, *Frederic's-town*, and *Read's-stone*, have two hundred inhabitants; *Elizabeth's-town* contains twenty, *M'Kees-port* thirty, and *Perry's-town* fifteen.

On the banks of this river is built the greater part of flat-bottomed boats which convey the emigrants to Kentucky, and also the boats with keels for the Mississippi; the first, called Kentucky boats, have the form of a great

oblong, varying in its proportions from thirty to fifty feet in length, and from twelve to twenty in width, but never less than four in depth. These boats are constructed without nails, which renders them very dangerous for the Mississippi, in which great numbers perish by the damage which they receive from the least shock, either against rocks, or great trees with which this river is sometimes choked, as well as by the difficulty of steering.

The most convenient size for boats with keels destined for New Orleans is from forty to forty-five feet long, twelve broad, and four deep; they ought to be strongly built; that is, to have their ribs very close to each other, and the helm of the same form as that of ordinary vessels. The great oar placed at the stern, with which the Americans govern the boat, is extremely dangerous, from the difficulty of making it change its direction with sufficient speed to avoid the great trees and trunks that frequently obstruct the passage, and on which, without great precautions, the boats are driven by the stream.

The ordinary price of these boats is a dollar and a half per foot, including the three oars, two of which serve for rowing, and the other for the helm.

Travellers who have the intention of visiting this part of the continent cannot be too strongly recommended to go to one of the ports of the Monongahela, and not to

Pittsburgh, where neither boat nor men are found, except at exorbitant prices, and an incalculable loss of time. There are two roads, the lower and upper road; after passing Bedford you meet with the upper road, known in the country under the name of the high road; this road is the best, and as it crosses the most inhabited part of the mountains, forage is more easily procured for the horses; but it is about ten miles longer than the other.

Travellers should endeavour if possible to reach the Monongahela before the end of June; because it may happen after this period that there is not sufficient water for the navigation during several weeks; this scarcity of water is, however, rare, and there is always enough for a boat without lading.

The lands on the Monongahela, when somewhat cleared and with a log-house, are worth about four or five pounds the acre; that is, from two pounds to two pounds ten shillings sterling. The general aspect of the country is healthy; there are no stagnant waters or morasses, and though fevers have been prevalent at M'Kees port, they are considered as merely accidental, or as the consequence of new clearings. It is generally remarked throughout almost every part of the continent, that the three first years after new establishments are almost

always feverish;\* but when once the lands have been heated by the sun, and the air purified from the moist and noxious particles by which it is vitiated, these spots become as healthy as old establishments; this is the affair of time and circumstances, and no way depends on climate, at least in the northern, eastern, and western States.

Thick fogs arise every morning upon the Monongahela, and which, greater in summer than at any other season, appear to augment in the same proportion with the heat. These fogs are not unwholesome; they seem rather an emanation of the plants and flowers which decorate the banks of the river, than an effect of the water; and the scent exhaled from them, far from being disagreeable, is aromatic and odorous. A short time after the sun has risen and acquired some force, these fogs ascend, and detach themselves from the surface of the water; but the influence of the sun preventing them from attaining any great elevation, they hang suspended some hours over the bed of the river, and in the direction of its course. At the hour of ten or eleven in the morning, the fogs

\* The new lands, composed of putrid vegetable substances, and loaded with febrile particles and noxious vapors, are the general causes of maladies to new settlers.

evaporate, but without producing rain, or any unhealthy damp, and are considered as the sign of great summer heats.

The Allegany river, like the Monongahela, is bordered by mountains, with a narrow strip of land on its banks; its current is more rapid, and its waters shallower and clearer. This river has frequent falls, which renders its ascent difficult: with a slight increase of water, it is navigable as far as Venango for boats of about four or five thousand weight. Venango is situated at the mouth of French Creek, where the river is still two hundred fathom in breadth, and is practicable even as far as le Boeuf; from whence is a carrying place of fifteen miles, which leads to the peninsula on the lake Erie. Its banks are in general thinly inhabited, because the Six Nations have hitherto been almost constantly at war with the Americans, and these tribes are masters of the whole course of the river. Since the peace has been signed, they appear to be more tractable, and are forming new establishments: boats are built on this river, but in small numbers. The quality of the soil on its banks, and the species of trees, are precisely the same as on the Monongahela.

## CHAPTER III.

*Pittsburgh.—Coal mine.—Carriage.—Forges.—Fort Duquesne.—  
Fort La Fayette.—Military position.*

PITTSBURG, formerly called Fort Duquesne, constructed by the French when they were masters of Canada, is situated on a slip of land which separates the waters of the Alleganies and those of the Monongahela. At this point the Ohio takes its source and its name.

This town contains, at the utmost, one hundred and fifty houses, some of which are built of brick, and the rest of wood. The neighbourhood of the Indians and the difficult communication between this town, Philadelphia, and Baltimore, appear to be the principal causes which have hitherto prevented its increase. Placed at the source of one of the noblest rivers in the world,

navigable as far as the ocean, after flowing eleven hundred miles, through the finest and most beautiful countries on the surface of the globe; this town, when the Indian frontier is thrown back,\* and the roads are rendered practicable, will certainly become one of the first inland cities of the United States.

The general aspect of the country is delightful; two chains of festooned mountains line the opposite banks of the river of the Alleghanies, and that of the Monongahela, stretching towards those of the Ohio. If at their junction the Alleghany river did not form an acute angle, which, by its projection, intercepts the magnificent prospective of the Ohio, the situation of Pittsburgh at this spot would perhaps be one of the most picturesque on the continent.

A rich vein of coal is found on the summit of one of the mountains which bounds the Ohio on the left. The quality of this coal is equal to the best kind in England; the mine is open, and the coal so cheap, and forming such excellent fuel, that although the inhabitants live in the midst of forests, they prefer it to their best wood. It costs less than four-pence sterling a bushel.

\* This has now taken place in consequence of the treaty made between the Indians and General Wayne, in 1797.

It is remarkable, that notwithstanding the difficulty and high price of the carriage of merchandise, this town has made little effort to establish manufactures, even for articles of the first necessity; these are still drawn from Philadelphia or Baltimore, and obtained at exorbitant prices.

The carriage of an hundred weight from Philadelphia to Baltimore is from eight to ten dollars, and from Baltimore seven or eight; notwithstanding this difference, two waggons come from Philadelphia to Pittsburgh against one from Baltimore.

A few iron mines have lately been worked on the Monongahela, where coppers, cauldrons, country ovens, pots, and other utensils of the like kind, are cast; the price of which is from forty-three to forty-five pounds per cwt. Pennsylvania currency; making from one hundred and fourteen to one hundred and twenty dollars.

No traces remain of the old fort Duquesne, built formerly on the most advanced point of the slip of land which divides the Allegany river from the Monongahela, and on which the town of Pittsburgh is situated. The whole has been destroyed by time and the floods.

During the war of 1756, the English constructed another fort, called Fort Pitt, a little behind the former, and of which the traces are yet seen. It is a regular

pentagon, the parapets of which now fill up the ditches, without palisadoes, and open on every side.

The Americans, less skilled than most other nations in military affairs, have built a<sup>n</sup> new fort on the left of the Alleganies, at a thousand yards distance from the back of the town, in a marshy situation, much below the level of the town. This fort is commanded at two hundred yards distance by a small ridge of heights, from whence the men may be seen from head to feet; it is called Fort La Fayette."

The reasons which determined Major Craig, who was the planner of this work, to build it in this spot were, that the Indians of the Six Nations, with whom the Americans were then at war, occupied a part of the Allegany river, which is situated on the right of the town, and that it was therefore necessary to place the fort on the right, and as near as possible to the town, which was punctually executed. He did not reflect, that if, by chance, the Indians should contrive to land two miles above the fort, on the left of the Allegany, and take possession of the heights, by which manoeuvre they could reach the foot of the town without being seen, they might kill the inhabitants, and burn the place, before any intelligence could reach the spot, or a cannon or musket be fired.

Fort La Fayette is merely a square with four bastions, on the platforms of which are erected block houses or barracks. In each of these block-houses is an embrasure on the side next the country, on which are placed pieces of cannon; on that which looks towards the town a small powder magazine is built, covered only with planks. Palisades from ten to eleven feet, placed on a kind of parapet, which is only three feet in height, including the depth of the ditch already half filled up, surround this fort, and give it the form of a bullock-pen. In a dark night four grenadiers, with a dozen faggots of dry wood, might burn the fort and all the garrison, and not a single individual escape.)

Eight hundred yards behind the town, is a ridge formed by a continued line of protuberances more or less connected with each other, and making opposite angles. This chain begins at the Monongahela, and runs parallel with the Allegany, at the distance of about six hundred yards from this river; it finishes at a small eminence forming a sort of sugar loaf, and which terminates this position.

This ground might contain ten thousand men; and three of these little protuberances, which are the most distinctly marked on the chart, would, if fortified, render this a strong position; the first is on the Monongahela, covering

the left of the post; the second is directly behind the town, and commands the Monongahela, the Alleghany, and the whole city, at the distance of only two hundred yards; the third is on the right of the position, which entirely flanks the slope of the mountain on the right of the Alleghany in front, and projecting a little more than the others, commands the whole left of the line.

This position would not be tenable against an army advancing on the side of Pennsylvania, because it might be turned and is commanded on all sides. In such a circumstance, therefore, it would be necessary to abandon this situation, and take post on the other side of the Monongahela, where, on the left bank, an excellent position may be found.

At this spot the boat waited for me which I had purchased at Mc.Kees port. I hired two Canadians and three Americans for the whole time my journey should last, paying ten piastres a month to each rower, and fifteen piastres a month to the pilot; on the condition that upon my arrival at New Orleans I should send back the Americans to New York or Philadelphia, and the Canadians to the Illinois, their respective countries, at my own expense.

At the moment of my departure, a young man presented himself, and asked me to give him a passage as far

as Cumberland river,\* observing that he had no money to offer me. I complied with his request, on condition that he would take an oar and work for his passage and maintenance. He answered drily, that he only worked for himself and never for any other man; that he had lost his way four months since when hunting, and that he would contrive to return as he came. I mention this slight incident because I shall afterwards have occasion to speak more particularly of this man.

\* The distance from Pittsburgh to the Cumberland river by the Ohio, is nine hundred and fifty-three miles.



## CHAPTER IV.

*Sources of the Ohio.—Hamilton Island.—Seven Mile Island.—Dangerous passage.—Popular opinion.—Legion's-town.—Crow Island.—Great Beaver Creek.—Grant Island.—Little Beaver Creek.—Yellow Creek.—Black Islands.—Judah Campbell.—Brown's Island.—Mingo's Bottom.—Henderson Island.—Mingo Town.—Buffalo Town.—Carpenter's Station.—Short Creek.—Weeling.—Hurricane.*

ON the sixth of June, 1794, we began the survey of the Ohio.

The Ohio is formed by the junction of the Monongahela\* and the Allegany,§ in latitude thirty-six, and longitude forty-five, at nearly one thousand and ten miles

\* The meaning of Monongahela in the language of the Indians is "muddy water."

§ Allegany in the Indian language signifies "clear or limpid river."

from the point where it empties itself into the Mississippi. The bed of the Ohio at the place where it takes this name, is very narrow, being scarcely two hundred fathom broad. The same chain of mountains which borders the Monongahela continues along the left bank of the Ohio; the foot of this chain is bathed by the waters of the *Beautiful* river, and appears like a wall raised by nature on that side, to prevent its wandering from its course. On the right side, but at the distance of one and sometimes of two miles, the chain of mountains that rises from the river Allegany, bounds the horizon. A fertile plain extends from the foot of those mountains to the banks of the river.

At a mile from Pittsburgh is Hamilton Island, which we left on the right, at the distance of a mile and a half. This island is low, and partly covered with water when the river rises. In this place the soundings are from five to five feet and an half.\* The swiftness alone of the current carries boats two miles and three quarters an hour without the aid of oars or sails.

After having passed Hamilton Island, the mountains on the left side fall back a mile from the river. The soil

\* The whole of the soundings were taken at a time when the waters were at the lowest,

of this small plain is of a yellowish color and of a middling quality.

Whilst the mountains on the left side fall back, those on the right which followed at some distance the course of the river, close in; and their sides, pointed with rocks, hang over the Ohio, which in this place is only three hundred fathoms broad. The depth of water is six feet.

About three miles lower than the head of Hamilton Island, and after passing on the left three small islands and Chartier's Creek, which takes its source near the little town of Washington, we reached Seven Mile or Long Island, which, notwithstanding its name, is only six miles in length. The chain of mountains on the right forms the bank of the river; that on the left approaches it nearly. The soil of this island is poor, and the ground low, but not subject to be overflowed in the season of inundations. We leave the island on the left, and take the channel on the right, where there is depth of water from four to six feet. The left side is impracticable.

A mile below the head of Long Island is a little fall, which is avoided by keeping within thirty fathoms from the right bank, where there is a channel four or five feet deep, on a gravelly bottom.

At the extremity of Long Island is another rapid full of rocks: this is one of the dangerous passages of the Ohio,

on account of the difficulty of keeping the channel. The vessel should be directed upon the point of the island, which must be doubled, keeping as close as possible, and immediately after having passed it the boat must be pushed to the left of the river, within twenty-five fathoms of the bank. Without this manoeuvre, which requires much precision, the boat would be thrown on a bank of gravel or rock that bars the river, and from which it would be very difficult to get off. This channel, which is from four to four feet and an half in depth, contains so great a quantity of fish called perch,\* that it is commonly reported they occasion the noise made by the water. Having touched on a bank of gravel in passing the channel, our boat crushed one of those fish. We were told that the noise of these perch prognosticates rain. It is unnecessary to make any comment on the folly of these popular stories.

After passing the island and clearing the rapid, you observe the mountains falling back from the banks, and leaving, between the river and their base, low lands of a bad quality. But at a very little distance from thence, the chain of mountains on the left resumes abruptly its

\* This fish is of the size of a large carp of the Rhine; its flesh is white and well tasted, but it is altogether unlike the perch of Europe,

first position, while that on the right continues to fall back.

Four miles below Long Island, we leave a small and very low island on the left. The channel on the right is four or five feet deep. We observed that the river here begins to grow wider, and two miles below the small island makes a bend towards the north. The navigation is on the left side, where there is six feet of water. The mountains during this passage retreat, and leave a valley, the low and fertile lands of which are watered by the Ohio.

Measuring from the bend of the river, we proceeded five miles without meeting with any obstacle, till we reached Legions-town, the former head-quarters of General Wayne, when he was sent against the Miamis in 1795. On this spot we observed fallen huts, the remains of an old camp; on the opposite side is a neat farm called Hill's farm.

After passing Legions-town, and sailing down a mile, we reached Crow Island, which lies on the left, and is a mile in length. The mountains on the right side fall farther back, whilst those on the left hang over the river, which in this place is six feet deep.

Four miles below the head of Crow Island is Great Beaver Creek: the land on each side is light. Great

Beaver Creek is scarcely fifty fathoms broad at its mouth; a fall three miles above prevents any further navigation. On the banks of this creek, and on an elevated plain formed by the mountains on the right side of the Ohio, the foundations of a small town are lately laid, called Beaver-town, composed as yet of only four or five houses. On the opposite bank to Beavers-town lies a neat farm called Kerr. The soundings at the mouth of Beaver Creek gave eight, twelve, and thirteen feet of water.

After Beaver-town, the river continues running in its bed without any obstacle: the water is from ten to twelve feet deep, and the soil on either side light.

At the distance of about five miles from Great Beaver Creek, we leave two small low islands on the right. The depth of water in the channel is six feet. Here the two chains of mountains join, and hem in the river. This is the most northern point of the Ohio.

At the distance of about two miles is another island, called Grant's Island, which you leave on the left, keeping to the right. The current here is extremely rapid, and the depth of water in the channel from twelve to fifteen feet; the land is poor, stony, and rocky.

Three miles below Grant's Island, we passed another small island on the right, opposite which is a little town, called Bird's-town, where there are two or

three huts. The river grows wider, and the mountains open, leaving on each side a large stretch of low lands.

Three miles below this last island, on the right, is little Beaver Creek, which is no more than twenty-five fathoms broad at its mouth, and is navigable only for two miles. The lands of Little Beaver Creek are lower, and of a better quality than those of the Great Beaver, which are high and stony.

After passing Little Beaver Creek, we found an assemblage of four or five log-houses, called Little Beavertown; opposite which, we left on the right Beaver Creek Island. The depth of the water is every where from fifteen to seventeen feet; the bottom is gravel, and the land of a middling quality.

Here is the line of separation between the States of Pennsylvania and Virginia: this line runs north and south.

Five miles below Little Beaver Creek we left again, on the right, another small island that has no name. This island greatly narrows the channel of the river which winds for five miles; at the end of its course we perceived two small islands, the names of which are also unknown: leaving these on the left, we reached Yellow Creek on the right, three miles below the head of the first island.

Yellow Creek is at its entrance from fifteen to twenty fathoms broad, but grows wider half a mile up; it rolls

over a bed of rocks, and is navigable only two miles for skiffs, on account of the great number of falls.

This creek no doubt takes its name from the yellow soil on its banks; there are two or three houses on this spot, and two or three acres cleared. The soil is of a light quality, and the vegetable mold in the lower lands not more than a foot in depth.

After passing Yellow Creek, where the river makes a bend of a mile towards the south, is the first of the four islands called Black Islands, distant from each other a mile or a mile and a half: they extend about five miles. The chain of heights on the left for two miles closes on the river; but that on the right falls back and leaves a large extent of low land, which is well inhabited.

The navigation in general is unvaried from Pittsburgh to the Black Islands, and the country presents nothing interesting to the eye; the lands are poor, and the wood of an inferior quality. Three miles below the last of the islands called Black Islands, and on the left side, lies a fine plantation, called Judah Campbell.

The chain of mountains on the left bank closing continually upon the river, and those on the right widening off, the space between is a stretch of low land, the richest we had descried since we left Pittsburgh. The wood is of large dimension, and of an excellent kind, and the

vegetable layer two feet, and of a chocolate color, which is an indication of its fine quality ; the depth of water twelve feet, and the navigation good and without any impediment. Two miles below Judah Campbell, we leave King's Creek on the left, and half a mile lower Brown's Islands on the right ; the channel is on the left, but these islands must not be approached too nearly on that side, there being shoals near, and rocks along the bank. In the mid channel is eight or nine feet water. When you have doubled Brown's Islands, the two chains of mountains close in on the river ; there are no more low lands, and the chain, sinking on the left, forms a terrace of great extent, the soil of which is of the first quality, the layer of vegetable earth being from four to five feet. Some miles lower, this chain of mountains rises a little on the left, and approaches the borders of the river ; that on the right falls back, and leaves a great extent of low grounds. The country is well inhabited.

Five miles from Brown's Island, and on the left bank, are the first houses of a very neat settlement called Mingo's Bottom. The water is here six feet deep, the navigation good, and without any obstacle. Three miles further, we reached Henderson's Island on the left. Low rich lands, almost all inhabited, lie on both sides the river. The island is merely a bank of gravel, on which grow a

few shrubs; the channel is on the right, and gives five or six feet of water : the soil here is less rich, and on a bed of gravel.

Opposite Henderson's Island, and on the right side, are several small huts close to each other, and built on a low land of great extent and entirely open : this place is called Mingo's Town. From thence to Pittsburgh, crossing the country in a right line due east, is a distance of no more than thirty or thirty-one miles; whilst, in following the course of the river, you travel seventy : a road for horse and foot is already made. (See the map of the Ohio.)

At Mingo's Town, all the difficulties of the navigation of the Ohio are considered as vanquished; because from this place to the mouth of the river, there is water enough for boats of one hundred and fifty to two hundred tons, seventy or eighty feet long, from fifteen to eighteen feet broad, and four feet deep, drawing from two to three feet of water. Mingo's Town may therefore be looked upon as the primitive point of the great navigation on the Ohio; and it is therefore probable that this place will become as considerable as its inhabitants presume, and will acquire the whole trade, which now belongs exclusively to Pittsburgh.

Three miles beyond Mingo's Town, on the left, is the little town of Buffalo, composed of twenty-eight or thirty

houses, some of which are built with brick and wood-work. This town is situated at the mouth of Buffalo Creek, and on a beautiful platform, the environs of which are already well cleared. This is the most considerable place in the road from Pittsburgh, and furnishes entertainment for travellers: there are already two stores or warehouses well supplied. Buffalo Town communicates also with Pittsburgh by land; the distance is computed about thirty-five or thirty-six miles; the depth of water opposite Buffalo Town is from seventeen to eighteen feet.

Five miles and an half below Buffalo Creek lies Carpenter's Station, an assemblage of three or four huts built on a low ground of a very good quality. Here the river begins to assume an air of greatness and majesty.

Four miles below Carpenter's Station, two currents of water flow opposite to each other; that on the right is Short's Creek, which is large, deep, and navigable for two miles inland; the other is only a rivulet, and is dry during the summer. In this place, and especially on the right side, and along Short's Creek, the lands are of the finest quality; the vegetable earth is from ten to twelve foot-deep; the white oak, the maple tree, and the sweet chesnut tree, are abundant: the depth of the water as far as Short's Creek is every where twelve feet, and seven opposite its mouth.

A mile below Short's Creek, we passed three successive islands which extend four miles : the first is called First Island ; the second, Middle Island ; the third, Gland's Island : both passes are equally good. In taking the channel on the right, the mariner must be careful not to approach too near the islands, which are surrounded with shoals a foot and half and two feet only below water ; by keeping a little on the right side about two hundred fathom from the bank, six, seven, and eight feet of water are found on a sandy bottom. During this space of five miles, you leave on the right a fine stretch of land called Mc.Coluh Grant's Flat : on this plain there are at least fifteen habitations close to each other ; and a mile and an half lower than the last island lies the little town of Weeling.

It was our usual practice to take the skiff to visit the interior of the country, and order our mariners to go gently down the Ohio till we rejoined the boat. We were busy with our survey, when the menace of an approaching storm determined us to regain our large boat with all expedition. The weather had been heavy, and so hot that the thermometer of Reamur was at the twenty-ninth degree. Although the air was perfectly calm, the river was swollen with those heavy waves which rise in the middle, and sink away without reaching the banks, and which are known by sailors under the

name of *houls*. The Canadians from those signs had forewarned us since the morning of a storm. A thick whitish cloud, bordered with a kind of white and black stripe, now hovered over our heads. We reached the boat, which we found moored to a great tree near the bank; we blamed the imprudence of our boatmen, since nothing is more common in these storms than the overthrow of trees, and the falling-in of the earth which separates them from the river, and consequently the loss of the boat, which is crushed to pieces.

But however dangerous our position, there was no time for change. The cloud had already burst, the sky grew dark as night, and it was only four o'clock; the wind began to blow most impetuously, and the thunder rolled with a noise unknown in Europe, and which till now I had never heard. The waters of the river, raised by the force of the wind more than three feet from their bed, overflowed both banks. A dreadful rain fell with incredible violence, and forced by the impetuosity of the wind, scattered itself often in vapor before it reached the earth. The trees were torn up by the roots, broken, and carried away; the thick darkness, which hindered us from distinguishing the nearest objects, was continually interrupted by vivid flashes of lightning, mingling themselves with the bursts of this terrible thunder, which the echoes

of the forests on the banks of the river repeated in doleful and tremendous sounds.

However dangerous our situation, our eyes were not the less fixed on this awful and sublime spectacle; when at the same instant a most violent crash drove us from the strange situation we had taken: the lightning, falling on the tree to which we were moored, rent it, cut the cord which fastened us, and gave up our boat to the mercy of the winds and waves, which carried it away with such violence that in two minutes we were blown almost out of the water, and thrown on the opposite side, having more than half the boat wrecked on the bank. The rapidity of this frightful succession of events preserved us from the apprehensions which the calculation of the dangers with which we were surrounded would have excited. No one placed himself at the helm, nor was it possible to direct the vessel: we should, therefore, according to all probability, have foundered, or have been dashed against the rocks or the high banks, had not chance, or rather the direction of the wind, served us better than the skill of the most experienced pilot, by throwing us on a soft and sandy point, which did very little damage to our boat.

This hurricane lasted seven minutes in its greatest violence, overthrowing every thing it met with on its passage: its direction was from south to north-east.

Notwithstanding its short duration, the rain fell so abundantly that our boat had thirteen inches of water. At length this tremendous shock was succeeded by the deepest silence of nature, and a light breeze cooled the atmosphere. We availed ourselves of these circumstances, to examine and repair our disasters.

On the following day, Mr. Warin and myself took a survey of the ground over which the hurricane had passed: we found every thing levelled for the breadth of about a quarter of a mile; no tree except the white oak remained standing, and its leaves were already of a brown yellow, as if they had been burned.



## CHAPTER V.

*Weeling.—M<sup>c</sup>Mann's Creek.—Dely's Station.—Captell Island Creek.—Fish Island.—Fish Creek.—Sun Fish Creek.—Opposum Creek.—Fisher's Creek.—Long Reach.—Isle Déchiquetée. Middle Island.—French Creek.—Three Brothers Island.—Cow Creek.—Calf Creek.—Bull Creek.—Little Muskingum.—Duval's Island.*

THE little town of Weeling is situated on the left side of the river, and at the confluence of a creek which bears its name. It contains from twelve to fifteen habitations, all of which are of wood, or log-houses. In the angle formed by the creek and the river, a small wooden fort is erected; it has four bastions, and two small block-houses are constructed thereon in the usual manner: the whole is surrounded with palisadoes ten or twelve feet high; but there is neither ditch, parapet, nor cannon. The town has two small stores, but scantily furnished; travellers,

nevertheless, may obtain some refreshments there; but they are excessively dear, since there is neither plenty nor concurrence.

Opposite Weeling is a beautiful spot, called Weeling's Island, exactly the form of a triangle: the land is sufficiently high to preserve it from all inundation. The right side of the river opposite Weeling is lined with heights; the left side is intersected with rising grounds and small vallies extremely fertile, where several habitations are already established, which gives the country an interesting and picturesque aspect. The water opposite to Weeling's Creek is ten feet deep.

Two miles below Weeling's Island, which you must leave on the right, you pass a creek on the same side, called M<sup>c</sup>Mann's Creek, which is seven or eight fathom broad at the mouth, and navigable for skiffs three or four miles inland.

Five miles below M<sup>c</sup>Mann's Creek we reached Dely's Station, where there are five or six log-houses built on a beautiful platform, open, fertile, and watered by a considerable number of small creeks. These kinds of stations have been formed by the union of several families, who were led, from fear of the Indians, to establish themselves near each other, contrary to the usual custom, which leads settlers to place their respective habitations at a distance,

when they can do so without danger. The water opposite to M<sup>c</sup>Mann's Creek is fifteen feet deep, and the navigation good.

Beyond Dely's Station, the mountains on the right fall back to a great distance, and leave a considerable space of low land, while those on the left continue to close upon the river. Opposite the Station, on the left side, are two creeks, the first is called Little Grave Creek, and the other Great Grave Creek. After four miles of good navigation, we reached Captell's Island: the depth of water, during the whole of this passage, is from fifteen to eighteen and twenty feet: we leave the island on the left; the channel has eight feet of water.

Two miles below Captell's Island, and on the right, is a very fine creek, Captell Island Creek, called erroneously on the map Grapwin's Creek, which name is not known in the country. This creek is about fifty fathom wide at its mouth, but is navigable only a mile inland, and that only in time of floods: the soil through which it flows is remarkably fertile; the depth opposite to its mouth is six feet, with a muddy bottom.

Three miles lower we reached Fish Island, a mile in length, and which we leave on the left: the channel is from ten to twelve feet deep. The aspect of the country opposite to this island varies: the mountains on the right fall back to a considerable distance, and those on the left

bound the river without leaving a strip of land: they are also nearly perpendicular.

Immediately after passing the island, we found a creek on the left side, called Fish Creek, which is navigable two miles during the floods, but only for barks: it is improperly marked on the maps by the name of Very Large Creek.

A mile lower than Fish Creek are two small islands which almost touch the main land; properly speaking, they are only sand-banks, which are dry when the water is low, and ought at all times to be avoided by steering to the left, where there is fifteen feet of water.

Three miles from Fish Creek, we passed Sun-fish Creek on our right, which is about forty fathom broad, and navigable seven miles for canoes of two thousand weight in time of floods. Low lands of the first quality are bathed by these waters on the left; the right is bounded by steep mountains. The depth of water opposite Sun-fish Creek is twelve feet.

Three miles below Sun-fish Creek we reach Opposum Creek on the right. We continued our route three miles further, leaving on the left a great extent of flat land covered with several new habitations. The river here loses a third of its breadth, but deepens in proportion; at the place where it bends, the depth is from twenty to twenty-five feet.

Eight miles below Opossum Creek, on the left, is Fishing Creek, on both sides of which are very rich low grounds well inhabited: the country which we traversed to reach these establishments had no inhabitants. Fishing Creek is navigable three miles for canoes of every size; the depth of water in the river is from twelve to thirteen feet, the navigation extremely good, and without impediment.

Five miles lower down the river, we leave on the left an island without a name, the first of five which we found in Long Reach, a stretch of twelve miles in which the Ohio makes no bend but flows in a straight channel: this channel is full of islands of different sizes, and crowned by small hillocks of graceful and varied forms. From the beautiful aspect which this country, yet uninhabited, presents, we may judge how lovely it would appear if clothed and animated by cultivation: the extreme fertility of the soil, the advantages of navigation, the abundance of fish and game, and the mildness of the climate, may lead to presume with a kind of certainty that a number of inhabitants will speedily repair thither; and that this fine country, now a desert, and only six months ago occupied by the natives, will soon be enriched by the produce of industry, and inhabited by families who will enjoy in peace the fruit of their labors.

The navigation of Long Reach, reckoning from the first island, is twelve miles; during which distance we leave the five islands on the left : the depth of the channel is constantly from ten to fifteen and sixteen feet.

At the end of Long Reach, the chain of mountains on the left closes upon the river, and that on the right falls far back, leaving a space of low and very fertile land.

Eight miles and an half from the last island of Long Reach, we found on the left an island hitherto unnamed; the irregular figure of which, formed of long points, led us to give it the name of *Ile Déchiquetée*. The channel is here twelve feet deep.

After passing *Ile Déchiquetée*, at a mile and a half lower on our left, we came Middle Island, marked incorrectly on the map in the same direction as the preceding island; since it is situated on the left side, and close upon the land. This island is about three miles long, and half a mile broad; its site is very elevated, and covered with fine wood : the channel by which it is separated from the left bank is not more than ten or twelve fathom broad, with a depth of nine or ten feet of water. I made the circuit of this island to ascertain its figure, whilst my boat followed the main channel. Nearly opposite the middle of the Island, and on the left side, I found a very fine creek, more than

twenty-five fathoms broad at its mouth, and navigable ten miles for canoes. This creek is altogether omitted in Hutchin's maps: the soil which it waters for three miles is of the first quality, but at a little distance is hemmed in and bounded by high mountains.

Six miles below the head of Middle Island, and on the left, is French Creek; and a mile lower lies the first of the three islands, called Three Brothers Islands. The two first are almost opposite each other, and have nearly an oval figure; the whole form a length of four miles and an half. We passed between the two first, and left the last on the right; the channel here is every where twelve feet deep, and without any obstacle.

Opposite the end of the last of these islands, a little creek on the left called Cow Creek empties itself into the river. A mile and an half below this creek, we found on the left two small sand-banks which are covered in floods; we leave them on our left, and kept the middle of the channel which is every where eight or nine feet deep. Here the two chains of mountains on the right and left suddenly disappear, and leave the river to circulate freely in one of the most noble basins I ever beheld. Though all the lands and woods are of a superior quality, this part of the country is still uninhabited as far as Fishing Creek, which makes a distance of forty miles.

Two miles and an half below the two sandbanks on the left side is a creek called Calf Creek, which is dry during the whole summer; and two miles further down on the left is Bull Creek.

After a safe navigation of five miles, and which yields nine, ten, and twelve feet of water, with a flat country on each side, we reached Little Muskingum, which is nearly ten fathom wide at its mouth. The navigation is intercepted by two falls, and encumbered with drift wood.

A mile lower than little Muskingum we reached Duval's Island; it is two miles and an half long, and follows the same direction as the river. We leave it on the left, and found in the channel from eight to ten feet of water. A creek called Ducks Creek lies on the right, and opposite to the middle of the island.

A mile below Duval's Island, the Muskingum river falls into the Ohio, at the confluence of which is the town of Marietta. Muskingum river is about one hundred and fifty fathom broad at its mouth, and is navigable one hundred miles for boats of four or five thousand weight.

## CHAPTER VI.

*Description of Marietta.—Observation respecting the Scioto Company.—Little Kanhaway.—Plantation of Bel Pré.—Island of Bel Pré.—Little Hockhocking.—Great Hockhocking.—Lee's Creek.—Belleville Island.—Devil's Hole.—Anderson's Island.—Abraham Burr.—Correction of Hutchin's Map.—Tartt's Fall.—Robertson Island.—Taylor's Island.—Great Kanhaway.—Observation.—Galipolis Island.—Omission.—Galipolis.—Raccoon Creek.—Little Guiandot.—Great Guiandot.—Twelve Poles Creek.—Great Sandy River.—Little Sandy River.—Gervais's Station.—Pine's Creek.—Little Scioto.—Tiger's Creek.—Great Scioto.*

THE site of Marietta presents the most agreeable landscapes imaginable. This town is built at the confluence of the Muskingum and the Ohio, the bed of which is filled with beautiful islands: in the back ground of these islands, the view extends over a vast range of hills of different

forms, and covered in several places with a variety of plants which in Europe are collected with so much expense and difficulty. The rude peaks of these hills which bound this delicious valley are decorated with flowers of various kinds, whilst the defiles of the mountains are shaded with a diversity of forest trees, interspersed with the honeysuckle and the magnolia. At the foot of the hills, the acacia spreads its tender branches tufted with flowers, and the tulip tree rears its majestic head towering above the shrubs. Here and there portruding masses of rock, contrasting with the brilliant verdure of the plants, give an air of enchantment to the whole scenery. It was in the middle of June that I visited this delicious abode; at the time when the vegetation was at its height, and when it presented itself with all its luxuriant graces, embalming the air with its various perfumes.

The remains of an old wooden fort with four bastions, which served as a defence against the Indians, may still be seen at Marietta: their present distance and state of tranquillity render this fortification now useless.\*

The ground on which the town is built, as well as that which surrounds it, is of a pretty good quality, although light: the inhabitants cultivate maize, rye, and hemp, but

\* See their new limits in the Chart, N°. II.

hitherto no wheat ; there are several stores established : the country, nevertheless, is poor, and its progress in resources and in population have been much retarded by the last destructive war of the savages.

The greater part of the population of Marietta is composed of five or six hundred families from New England : a few unfortunate French families have also taken refuge in this place, victims of American land speculators, and of the ignorance or weakness of the chiefs of the Scioto Company.

From the information we obtained on the spot, respecting the causes of the ill success of the Scioto undertaking, of which we have heard so much in France, and of which so many have been the dupes, it appears that the chiefs of the Company were deceived by their first agents, which always happens in America to purchasers who are not themselves acquainted with the situation and quality of lands ; that they had not taken sufficient security with respect to the validity of the titles ; and that, placing themselves near the Indians, they neither treated with them for the possessions nor the limits, which would have been very easy from the good will which the Indians throughout the whole of these countries bear towards the French ; that the leaders in the undertaking, under the influence of terror, took the absurd resolution of stopping at Mus-

kingum, where they were really surrounded by the Indians, and giving up Scioto after proceeding two-thirds of the way. If it be difficult to justify the folly of men, who quitted France to establish a colony on the Scioto without using the least precaution; and who, without the knowledge which was necessary to succeed, charged themselves with the care of three hundred families composed of their countrymen; nothing can ever excuse them for abandoning, in the midst of deserts and dangers, those unhappy families whose confidence they had betrayed, by assuring them they would hasten back from Philadelphia, whither the interests of the Society called them, when they formed the resolution of returning no more. Had these chiefs procured good information respecting the disposition of the Indians, which was very easy, they would have learned that these tribes are invariable in their attachment to the French; and if, instead of flying in panic and terror, they had sent two French deputies to the Indians, who were then at war with the United States; far from being attacked, the French colony would have met with protection and assistance from the savages, on condition that they would not mingle in their disputes with the Americans. But the apprehensions of the new colonists were too powerful, and were strengthened by the Americans, to whom these unfortunate strangers had committed their interests;

from this pusillanimous and hasty conduct, resulted the massacre of many of those families, together with the total ruin of such as escaped the carnage. We learned these details from some of those families, and from two chiefs of the nation of the Miamis.

Three miles below Marietta, we left on the right a small creek: the country on both sides is flat and without mountains; the water is thirteen feet deep.

A mile and an half below the creek, we passed an island on the left; the channel is eight feet deep.

Three miles farther on, we found another island smaller than the first, which we left on our right: the water is here from fifteen to sixteen feet in depth; the country continues to be flat on both sides.

Three miles from the last island, we reached a third on the left: this island is peopled, but the others are uninhabited: they are all high and well wooded, and are not distinguished by any particular name.

At three miles distance from the head of the last of these three islands, and on the left side of the Ohio, we reached the Little Kanhaway.

Mr. Hutchins, in his description, makes no mention of this river; which is, perhaps, among those that flow into the Ohio, the most worthy of observation: it is not less than four hundred and eighty feet wide at its mouth,

and fifteen, sixteen, and seventeen deep; its navigation is perfectly good an hundred miles for a canoe, and fifty for a barge, and its current so gentle that you must examine it attentively to discover its direction. I went ten miles up this river, and my boatman agreed that he found little difference in rowing with or against the stream: a river cannot present a greater advantage either to commerce or agriculture. The Little Kanhaway waters a country extremely fertile, particularly on the right: the land on the left, though more unequal, is not less productive, and is even preferred by the farmers for growing wheat.

A mile below this river, on the right side, is a fine plantation, the first in the county of Bel Pré: this is the oldest establishment on the Ohio; it was cleared and settled when the French had the possession, and extends on the banks of the river seven miles, the whole of which is well cultivated.

In the extent of those seven miles, are several islands; and amongst others, one very considerable and well inhabited, which is called Bel Pré Island, three miles in length. We passed it on the left, and took the channel on the right, which is from ten to fifteen feet; that on the left is obstructed by two small islands, which appear to have been formed of a part of the soil of the great island. At the extremity of the island of Bel Pré, there is a second, very small, which we passed on our left.

Two miles lower than the end of the island of Bel Pré, and on the right side, is Little Hockhocking, which is altogether omitted on Mr. Hutchins's map, in his description of the Ohio: this river is about sixty or seventy feet wide at its mouth, and is navigable for great barges sixty or seventy miles; its banks are sufficiently high to preserve the lands from inundation: the country is hilly, and full of coal mines.

Six miles and an half below Little Hockhocking, is Great Hockhocking: in the course of this navigation, which is excellent, we passed two islands on the left, and found every where fifteen and sixteen feet of water: the left side is uninhabited: here the appearance of the country changes, the right is bounded by heights,

Two miles below Great Hockhocking, and on the left, is a little creek called Lee's Creek, on which is placed the station of Belleville, and which contains four or five huts; the navigation is excellent, with a depth of water of twenty feet.

Two miles below Lee's Creek is an island called Belleville Island, almost closed in by the main land, and which we passed on the left. Leaving on the same side Ford's Creek, we proceeded eight miles, reckoning from Belleville Island; during which the navigation continued to be excellent, furnishing always from twenty to twenty-five feet,

and came to a creek called by the French *Trou de Diable*, and by the Americans Devil's Creek, situated on the left; the country was still uninhabited.

After passing Devil's Creek, we observed that the country on the left rises with a gentle slope, and on the right the heights fall far back, leaving a large extent of low and fine land.

We proceeded six miles, leaving on both sides a number of rivulets which run through a desert country, and in summer are dried up: at the end of these six miles, we reached Anderson's Island on the right. The navigation continues good, with eight to fifteen feet of water, and no obstacle in our course. Anderson's Island is inhabited, and is formed of very fine high lands which are never overflowed.

Seven miles further, we found, exactly in the middle of the river, a small low island covered with willows: the channel is practicable on both sides; that, nevertheless, on the left, is the best when the waters are low, being nearly fifteen feet deep: care must be taken not to approach the island, which is surrounded with shoals: the country continues desert, and offers the same rude aspect.

After passing this last island, at the distance of two miles, we reached on the left Abraham Burr's Farm. Two miles lower, we found two small islands, one of which only

is marked on Hutchins's chart, the other being set (if the expression may be allowed) in the left bank, which probably was the reason that the channel which separates it from the main land was taken for the mouth of a creek. We might also have fallen into the same error, had we not made the tour in order to ascertain the fact: we found a channel more than three hundred feet wide, with about four or five feet water, and the current very strong. This spot we called Discovered Island; it appears to be about a mile and an half long, and is overflowed in high waters.

We passed those two islands on the left, and also a creek called Mile's Creek, situated a mile below Discovered Island; proceeding a mile further, we found two other islands, which we likewise passed on the left; they extend two miles: the navigation is every where good, with a depth of twenty to twenty-five feet; the country is uninhabited, and covered with wood.

Two miles from the two last islands is Tartt's Fall, which is merely a strong current; we kept to the right, at three hundred yards distance: it is easy to distinguish the channel by following the line of water which is the least agitated; that which passes over the breakers being white and foamy: there is eight feet of water in this channel. It was at this fall, that the Indians killed such numbers during the war; the barks being obliged, when

the waters are low, to keep near the right side in order to follow the channel: there the Indians placed themselves in ambush, and inhumanly fired on all who passed in boats, whether friends or enemies.

The river, for nineteen miles, winds across an undulating country: at the end of this passage we reached Robertson's Island, which we passed on the left: the navigation from Tartt's Fall to Robertson's Island is unobstructed, and the water from twelve to fifteen feet; the country is entirely desert.

Immediately after Robertson's Island, and on the left side, is Robertson's Station, which is a very fine and extensive farm, and where all sorts of provisions and refreshments for travellers may be found.

Three miles lower, on the left, is Taylor's Island; the navigation is every where good, and the water from eighteen to twenty feet deep.

Six miles further we reached Pleasant Point, situated at the confluence of the Great Kanhaway. Between Robertson's Island and the Great Kanhaway, are several new establishments on the left side of the Ohio; but this country, the soil of which is of a very fine quality, is unprovided with spring-water, particularly on the right: and to this cause we may probably attribute the state of languor and weakness in which the establishment at Pleasant Point remains, where the whole of the town consists only

of fifteen or twenty wretched logg-houses, inhabited by forty or fifty poor inhabitants.

Great Kanhaway river, like most of those which are tributary to the Ohio, is much larger inland than at its mouth; in many places, it has the same breadth and the same majesty as the Ohio: its source is slow and gentle as far as ten miles from its junction, during which space it waters a very fertile country; from thence the land rises; the current of the river becomes more rapid, and continues so as far up as the fall at the distance of sixty miles from its mouth; the largest boats, however, go up the stream without much difficulty. A carrying place at the fall, across the defiles of the mountains, of five or six miles, practicable for waggons and carts, has lately been discovered: at the end of this place, the goods may be replaced in boats, carrying from two to three thousand weight, which ascend to the very sources of the Great Kanhaway: a communication from hence, to James River in Virginia, has been projected.

After leaving Pleasant Point and the Great Kanhaway, we reached, three miles lower down, Galipolis Island, which we left on the right and took the channel on the left, being every where fourteen or fifteen feet, while that on the right is extremely dangerous and full of shoals. This island has been totally forgotten on Hutchins's map: it is about two

miles long and six hundred yards broad, surrounded with shoals, and for the most part so low as to be overflowed in high waters: a floating mill is erected in the channel which this island forms with the Ohio; a proof that the island has no running water.

Immediately after passing Galipolis Island, we reached the little town of Galipolis on the right: its population may be reckoned at ninety or ninety-five men and from forty to forty-five women,---a community formed of the wreck of the Scioto Company. The Congress granted seven acres of land to each family, which is not sufficient for their subsistence, and therefore they are extremely miserable. The town is situated in a platform covered with stagnant waters, which renders this spot extremely unhealthy: and the quality of the land is bad, being light and sandy. The town is built of small huts or log-houses close to each other, and is flanked by three block-houses; the whole palisadoed with great piquets: the streets are laid out in lines; but the present appearance of the place is dirty, and it seems to be the abode of wretchedness.

The Congress, in 1796, granted to each family two hundred and fifty acres of land near the Little Scioto; to indemnify them for all the sufferings, robberies, and murders, of which they had been the victims, from the carelessness, knavery, and perfidy of its agents.

In quitting Galipolis, we left on our right a small creek which is dry during the summer. Four miles lower is a little island, the name of which is unknown: this island has two channels equally good, but in low waters that on the right is preferable, having fifteen feet. Here the country rises and becomes a little hilly, but is still destitute of springs, which will long prevent it from being inhabited.

After eight miles excellent navigation, across a country which continues to be a desert, we reached a creek situated on the left, called Racoon Creek: we found in every part from fifteen to eighteen feet water: in this space, the two chains of mountains on both sides fall back, and the river runs through a track of low land, which however is not subject to inundations.

All the creeks marked on the map from Tartt's Fall are dry for the most part during the summer; they ought to be considered merely as ravines, which serve for carrying off the waters in great rains.

Seven miles below Racoon Creek, on the left, we reached Little Guiandot: the navigation continues good, and without any impediment: the country is uninhabited, and its appearance is similar to the preceding.

Eight miles and an half lower, and on the same side as the Little Guiandot, is Great Guiandot, which is about one hundred and twenty yards broad at its mouth: its

current is very rapid, but canoes can go up for sixty miles.

Nine miles farther down, we came to Twelve Poles Creek. During the last eight miles, we left on our right two creeks, which are dry during the summer. The country wears the same aspect, and is without inhabitants; the navigation is good, the depth of water being every where from fifteen to eighteen feet.

We passed on our left Great Sandy River, six miles and an half from Twelve Poles Creek. This river is nearly of the same breadth as the Great Guiandot: its course is more gentle, and it is navigable seventy miles for great boats: the lands through which it runs are low and sandy, and often inundated by high waters. Towards its sources, it traverses a country full of rocks and stones, and extremely barren. In this spot, the right side of the Ohio is bounded by a great height, which touches its banks: the heights to the left, on the contrary, fall back, and leave a tract of low lands.

After quitting Great Sandy River, we found, three miles lower down on the right, a creek without a name. The chain of rocky mountains on the right continues to run along the bank: the navigation is good, and free from every obstacle: the depth of water is from ten to sixteen feet: the country is a desert.

A mile lower on the right we found a torrent: the chain of rocks runs still along on the right; the left is a tract of low and sandy ground: the depth of water is fifteen feet, and the navigation good. Two miles below this torrent, we left, at the distance of four hundred yards from the banks of the river on the right, a mass of rocks, extremely high and steep, covered with small firs. The left side continued flat and sandy.

Three miles from the beginning of the rocks, on the left, is Little Sandy River: here the Ohio is considerably augmented, and is not less than from fifteen to twenty feet deep; both banks may be approached without the slightest danger.

In quitting Little Sandy River, we left on the right two new settlements called Gervais's Station: the Congress has just made a concession of several thousand acres of this land to the inhabitants of Galipolis.

We continued our route for thirteen miles, passing on the left a few ravines without water, till we reached Pine's Creek, during which course the navigation continued excellent: the river is bordered on both sides with fine lands, chiefly that on the right, where no mountain is to be seen; but this part of the country is unprovided with spring water, and the little which is found, is brackish.

Two miles from Pine's Creek, on the right, is Little

Scioto, which is about twenty yards wide at the mouth : it is full of currents and falls, and being also encumbered with trunks of trees, is impracticable for canoes : a wretched hut belonging to hunters stands on the right near its mouth.

Six miles lower, leaving three small ravines on the right, we reached Tiger's Creek, which is not navigable, being filled with rocks and encumbered with drift wood : here a chain of high mountains covered with rocks runs along the left side ; the ground on the right continues low, and the soil is fine but without water.

Six miles from Tiger's Creek, leaving on our right a hunter's hut, we reached the Great Scioto.

## CHAPTER VII.

*Great Scioto.—Silk Worms.—Colioochee.—Kennekenna's Creek.—  
 Mitchel's Station.—Salt Works.—Salt Lick Creek.—Graham.—  
 Middle Creek.—Onalson's Creek.—Manchester.—Character of  
 Independance.—Brush's Station.*

THE Great Scioto is from two hundred to two hundred and forty yards wide at its mouth; it is bordered by fine natural meadows; and the banks on the right are crowned at four miles distance by a chain of heights which run towards the north. In high waters, a portion of land on each side the river is overflowed; but these inundations reach no farther than fifteen miles from its mouth, the land at this point rising gradually. The Great Scioto is navigable seventy miles for all kinds of barges, and two

hundred miles for canoes : the current is slow, and easy of ascent.\*

The lands watered by the Great Scioto are of the first quality; the greater part covered with very fine wood, and particularly with white mulberries, which are found in larger quantities here than in any other spot : there are also here an infinite number of silkworms, that feed on the trees, and make their pods in such extraordinary profusion, that large tracts are whitened by these pods which strew the ground : the inhabitants of the country, however, reap no advantage from thence ; since hands are too scarce, in these regions, to be employed for any other use than the cultivation of an excellent soil.

A great quantity of springs of salt water are found on both sides the Great Scioto, but these springs are in general weak.

Within six months, several American families, coming from Kentucky, have established themselves on the right side of the Great Scioto, and at its mouth. These are

\* Mr. Hutchins is wrong in observing that the Great Scioto is navigable as far as a carrying place, which is four miles distant, in order to gain the sources of the river Sandusky ; it is, probably, the river Miami that he means. The carrying place of the Great Scioto to the Sandusky is seventy miles.

the first whites who have dared to meet the fury of the Indians, by whom the country has been defended with firmness and perseverance against the invasions of the Americans: it is at the mouth of the Scioto that the greatest number of massacres have taken place, during the war which was carried on against the Indians by the United States.

Thirty houses are already built, and the plan of a small town is marked out; which, from its position and the richness of the soil, will probably become one of the most pleasant and populous of all the establishments formed on the Ohio. It is chiefly inhabited by Swiss; the land already sells for eight piastres an acre.

Independently of this little establishment, about forty families, since the peace with the Indians, have gone up the Great Scioto an hundred miles from its mouth, have formed settlements, and already began to clear the land.

After passing the mouth of the Great Scioto, the chain of heights which borders the left of the Ohio falls back to the south-west; but two miles lower down, this chain gradually approaches its banks, and returns again to take its first direction, leaving a tract of fine land, which, rising from the Ohio in a kind of amphitheatre, is secure from inundations. The wood along the whole of these heights is generally stunted, and of a bad quality;

and the only good soil to be found, is that situated in the low lands.

At the distance of seven or eight miles from the mouth of the Great Scioto, the two chains of mountains close upon the banks, and run parallel with the river, taking the name of the heights of the Little Miami : the summits of these two chains are sometimes uniform and of an equal height, and sometimes rise in the form of sugar loaves.

After descending the Ohio eleven miles from the Great Scioto, in which space we found from twenty to thirty feet of water, we passed on the left Kennekenna Creek, which is not navigable during the summer. Two miles beyond this creek, and after leaving a small island on the right, we reached a creek called Turkey's Creek, opposite to which is another small island. The chain of heights, of no great elevation on the right side beyond Turkey's Creek, falls off a little from the bank, and leaves a space of a mile and an half covered with fine low grounds which begin to be inhabited.

Four miles distant from Turkey's Creek, and on the right, is Mitchell's Settlement, which is already very considerable. The navigation from Turkey's Creek is excellent : the depth of water is from twenty to twenty-five feet. The heights on the left side from Kennekenna Creek bound the river the length of six miles below

Mitchell's Settlement; the country is undulating and the soil fine, but without springs. The lands on the right are better watered, and there are several small sources in the mountains.

After eight miles of good navigation, we reached on the right a salient point formed by the river, which is an alluvion, covered with small willows. We kept to the left, avoiding carefully this point, towards which we were driven by a very strong current, and the whole of which is surrounded by shoals. The bed of the river is here considerably narrowed by this alluvion; nevertheless, by keeping the channel, we always found during these eight miles from fifteen to eighteen feet of water.

Immediately after passing the point of the alluvion, we found on the right a very strong counter current, the velocity of which may be computed at four miles an hour.

Two miles below this point, and on the left side, we reached Vunce's Burgh, commonly called the Salt Works. This establishment is still in a languishing state; four or five negroes and two whites are the only persons employed in a manufacture which presents such important advantages for this part of the continent. The spring of salt water is very abundant, and is about eight feet in diameter and twelve in depth; we thought it weak to the

taste; but the proprietor assured us, that having been overflowed in the last inundation of the Ohio, it had lost a great part of its force. No chemical experiment has yet been made to discover exactly to what degree this water is impregnated with salt. The computation made on the spot is, that four hundred gallons produce nearly fifty pounds weight of salt.

Four buckets, suspended like those of a gardener's well, are employed in drawing the water, which is emptied into a little reservoir made of the bark of trees, and placed on small rafters, from which the water falls into troughs framed of the trunks of trees, and from thence into boilers. These boilers are of different sizes; and the largest contains about twelve gallons: they are placed parallel to each other on stoves cemented with mud. The whole of this apparatus is so ill combined that each of these boilers requires a separate fire, and after each boiling the stoves must be newly cemented. We may judge from hence how great must be the loss of time and the consumption of fuel.

This place is infected every summer with putrid diseases, occasioned by the marshes which surround it. Five or six log-houses form the whole of this establishment, which offers no accommodation whatever to travellers. The quality of the land is bad; what is not

marsh, is gravel, covered with the finest beech trees which can be found in America; but it is well known that this kind of wood indicates almost always a poor soil.

At half a mile from Vunce's Burgh and on the same side is Salt Lick Creek, which is navigable neither for boats nor canoes.

Having passed the creek, we perceived the heights on the left side falling off towards the south, leaving between them and the river a tract of flat country of nearly three miles, the soil of which is of the richest kind. The heights on the right run close along the river, forming distinct knolls, with gentle declivities. We are led to believe from the form, the aspect, and the soil of these hills, that the kind of wild vine which grows there may one day be cultivated with advantage.

The navigation for nine miles below Salt Lick Creek yields from twenty to twenty-five feet of water, without the slightest obstacle. We passed on the left a farm and small creek without a name, and reached an establishment belonging to Mr. Graham, situated on the left side of the river, and consisting of several beautiful farms, the first depending on the State of Kentucky, and which form an extent of more than six miles. Here the two chains of heights fall back, and leave a stretch of fine low land on both sides.

On the side of the river opposite Graham's farms are several new settlements, which would enjoy all the advantages that nature can yield, if the country were not totally destitute of water.

Three miles below Graham's settlement is an island, called Middle Island, which we left on the right. The water in the channel is from fifteen to twenty-three feet.

Opposite Middle Island, on the right, we passed a creek called Brush's Creek, which, although considerable, is omitted in Hutchins's map. Three miles lower and on the same side is another creek, which is marked in Hutchins's map by the name of the Little Scioto, and known in the country by that of Onalson's Creek. The Little Scioto, as we have observed above, is situated immediately beyond the Great Scioto.

Opposite to Onalson's Creek a small creek empties itself, called Sycamore Creek; but this, properly speaking, is only a ravine during the summer. Between Brush's Creek and Onalson's Creek the country continues to be open, and is well inhabited.

After descending five miles from Onalson's Creek, we reached the Three Islands lying across the river. When the waters are high, the channel on the right is practicable; we passed it, however, with great difficulty,

on account of the sinuosities and the trunks of trees with which it is encumbered. The water is every where from nine to ten feet deep. But the best and safest passage is on the left, between the small island and the river, where there is always sufficient water, and the channel is straight: the passage in the middle must always be avoided, being full of shoals.

Two miles below these islands, and on the right, is situated the little town of Manchester, built in a straight line, parallel to the bank of the river, and about a mile in length. The first house was built five years since, and there are already more than an hundred, great and small. The ground on which it is built is in general bad; it is a yellow sandy soil, and the town is surrounded by marshes. This is, however, one of the intermediary points between Pittsburgh and Limestone, where the traveller may hope to find most accommodations: Manchester is a town full of mechanics; such as wheelwrights, carpenters, smiths, shoemakers, and taylors.

At the moment of our departure from this place, we perceived, at a considerable distance, something bulky floating in the midst of the river. Not being able to imagine what it could be, since it had neither the form of a boat, nor of drift wood with which the river is often encumbered, we determined to wait a few minutes in

order to gratify our curiosity, which was strongly excited. In about a quarter of an hour, we clearly distinguished a man with a dog by his side, a gun in his hand, and seated on logs of wood tied together, which floated down the stream. When he drew near, we made towards him; but what was our surprise in accosting him, to find in this man the young hunter we had left at Pittsburgh, and who had refused to work on board our boat with the men we had hired for that purpose.

He told us, that immediately after our departure he had himself constructed this small raft, with the intention of proceeding in this manner as far as Cumberland River, where he lived; that he went on shore every evening, fearful of driving against the trunks of trees which floated in the river; that every morning at day break he hunted to procure himself food; that he had killed a fine buck that morning, of which he offered us half, provided we would give him biscuit in return, not having been able, for want of money, to lay in a sufficient quantity at Pittsburgh. We gave him twenty-five biscuits, but he would not accept them, till we had taken in exchange half of his game; we offered him powder and shot, which he also refused, though his store was much diminished, observing to us that he had nothing to give in return; and then quitted us, letting his raft drive down the stream.

The reader will no doubt be gratified in observing in this young man, that noble character of independence which induced him to reject offers by which he would have incurred obligations. Amidst those vast deserts, on a river which, from his mode of travelling, exposed him to great dangers, with no means of subsistence but such as chance and his courage could procure, he preserved his independence, because he was not degraded by want. Independence is indeed a refuge against a multitude of evils, and the man who is in the enjoyment of that blessing is far beyond the reach of fortune, and is rich in his own resources.

A mile from Manchester, we left on our right a small creek, called Izick's Creek. Both chains of heights at this spot close in upon the river, and no flat lands are to be seen; the left side is, however, well inhabited.

Three miles and an half below Izick's Creek, and after passing, on the left, a very small creek which has no name, we reached Cabin's Creek, which is somewhat considerable, but so full of rocks and falls that it is not navigable. Both chains of heights at this point are extremely elevated, and the bed of the river being hemmed in, the depth of water is consequently greater; from Manchester to Cabin's Creek, the river is from twenty-five to thirty feet deep.

Two miles and an half lower than Cabin's Creek, we came to Brook's station, which is a very fine farm. Here the two chains of heights begin to fall back, but chiefly that on the left. The whole of this side is perfectly well inhabited, though the soil appeared to us yellow and light.

After descending four miles further, we reached Limestone.

## CHAPTER VIII.

KENTUCKY.—*Limestone.*—*Washington.*—*North Licking Creek.*—*Lee's Creek.*—*Johnston's Fork.*—*Blue Lick.*—*Licking River.*—*Miller's Burgh.*—*Bourbon.*—*Observations.*—*Lexington.*—*Frankfort.*—*Nature of the Country.*—*Hemp.*—*Population.*—*Emigrants.*—*First Class.*—*Second Class.*—*Third Class.*—*Free Men.*—*Old Forts.*—*Commerce.*—*Comparative Sketch.*

**LIMESTONE** is a very small town on the left of the Ohio, at the foot of a steep mountain, and which, from the narrow space between the hill and the banks of the river, can never be very populous; it is, nevertheless, the depôt of whatever goods pass from Baltimore and Philadelphia to Kentucky, as well as the halting-place of all travellers who visit these countries. At Limestone, however, few resources are to be found; the inns are wretched public houses without provisions, and the little that can be obtained is procured with difficulty and at an exorbitant price.

On quitting this town to visit the inland country, we ascended a very steep and difficult hill, full of large stones, many of which were loose ; but this is the only road for waggons and carriages to convey such goods as are brought in boats to Limestone for the stores of Kentucky. When we reached the plain at the top of the hill, we found the road less difficult and stony : after descending one hill which was more gentle, and mounting another, we passed a rivulet near which are three roads : those on the right and left only lead to farms, and to a country that is uninhabited : we followed the middle road across the woods, and at the end of a mile found two roads, the left of which leads to Brook's Town, and the right to Wood's Mill ; the last is the road to follow. A mile further the road divides again ; that on the right goes to Braken, a small town newly built : we followed the other for a mile and an half, and reached the town of Washington.

Washington is situated in the midst of a vast open plain, which gives it a barren aspect, though the soil is not bad. This town is very regularly built, and contains about two hundred and fifty, or three hundred inhabitants : the houses are almost all of wood ; two or three only are built of brick. There is a court-house, and several stores, two or three of which are excellent ; the appearance of the country, however, deprived of water, presents a dull sameness.

From Washington to North Licking Creek, we traversed three miles and an half of better road than that we had left behind: at this creek, there is a very good bridge. The river is never fordable in any season; the banks are steep, the bottom muddy, and the land on each side marshy, which in time of war would render this an important defensive position: from this bridge to Lee's Creek, we proceeded three miles across woods that are uninhabited, and a country interspersed with small heights. Lee's Creek is fordable at all times.

After passing Lee's Creek, we came to a flat and level country which is well inhabited, containing fine lands that are plentifully watered; and a mile below Lee's Creek, we reached Mazelaek Tavern, which furnishes good accommodation.

Five miles from Mazelaek's Tavern is Johnston's Fork: the four first miles lie across a fine plain perfectly well cultivated, and the fifth forms a gentle descent. We forded Johnston's Fork, which is a small branch of Licking River, and then ascended a hill for the space of a mile, that is woody and uninhabited; on reaching the summit, we found a plain five miles in extent, which is also without any habitation: at the end of this plain, we passed a rivulet, and descending two miles a very steep road full of stones, came to Blue Lick.

The whole of the country from the plain is dry and open, strewed with rocks, and consequently barren; the only objects of vegetation we descried were a few small pines peeping above the crevices of the rocks; every thing else around bears the marks of sterility, desolation, and sadness. We found a poor salt manufactory at Blue Lick, which probably has acquired its name from the salt spring, the color of its water being of a very fine blue; on tasting this water, I found it scarcely brackish: it requires a thousand gallons to make a bushel of salt weighing fifty pounds, which sells on the spot for twenty shillings of Virginia (three dollars and an half). We may conceive what must be the consumption of wood to obtain so considerable an evaporation, and thereby judge of the little value of the spring, since the forests around must be speedily wasted: the mode of manufacturing, too, is extremely vicious, and similar to that which I have already described in treating of the salt works at Vunce's Burgh.

At a very small distance from Blue Lick we reached the principal branch of Licking River, which we passed in a ferry. Five hundred yards below this ferry is a bank of calcareous stone, which is dry when the waters are low, and stops the navigation during two or three months of the year. Except in seasons of drought, this river is navigable one hundred and fifty miles for the largest boats.

After passing Licking River, we came to a desert country composed only of masses of rock: we journeyed eight miles along a road which was almost impracticable, from the immense quantity of ravines and enormous stones with which it is encumbered, and found on our way a wretched hut inhabited by woodmen and hunters. Four miles further on, we reached a small town called Miller's Burgh; the country, during these last four miles, is less desert, and contains a few habitations; but the general aspect, for the space of twelve miles, is bad; the lands are poor, and the wood small and stunted.

Miller's Burgh, marked on the map by the name of Hingston, is agreeably situated on a small creek called Hay's Creek, the waters of which empty themselves into the southern branch of Licking River, which is navigable at all times for boats and barges to the Ohio, beginning five miles lower down than Miller's Burgh. The land four miles on this side of Miller's Burgh is of a better quality; the value of that near the town is from six to eight dollars per acre; a lot of half an acre in the town costs already two hundred pounds, or five hundred piastres.

Leaving Miller's Burgh, we forded the creek, the road from which turns quite short to the left, and that on the right leads only to the woods. Crossing a plain finely cultivated, and proceeding eight miles, we reached Bourbon

Court House, situated between the southern branch and a small arm of Licking River, which forms an island five miles below Cheap's Mill, where that river begins to be navigable. Notwithstanding the inconvenient situation of this town, there are already two hundred houses built in stone, and thirty or forty stores or warehouses.

Though the river is deep, yet its banks in general are low and firm, and its bed excellent; it presents, therefore, in a military point of view, from Cheap's Mill to its source, but very feeble means of defence. Were it not for the facility of passing this river in all seasons with an hostile armament, Bourbon Court House would perhaps be one of the best defensive posts in all the habitable part of Kentucky, being situated on a fine elevated plain, commanding a very considerable distance in all the points of its circumference, and bounded by two branches of the river to its sources: this position seems destined, at a future period, to be the central defensive point of Kentucky.

After travelling nineteen miles from Bourbon Court House, across a great and extensive plain, sometimes grouped with woods, and sometimes interspersed with farms, equal for the construction of the buildings and the cultivation of the land to any in Europe, we reached Lexington. This town is situated in the midst of a vast plain as open as that of Philadelphia, and on which there

is not a tree to be seen four miles around ; a whitish soil without water, and a burning sun in the month of July, are all we found and felt in the neighbourhood of Lexington. The town contains from three to four hundred houses, the greater part built of wood, and arranged regularly in two parallel lines running south-east and north-west: a square is left at the central point, in the midst of which a court house is erected. As this town has no navigation, it is presumed that its increase will not be great, and that Frankfort will be the real place of commerce.

Four miles from Lexington, we forded one of the sources of the River Elk, called Wolf's Run, which is not navigable, being only a rivulet, and throws itself into that of Kentucky. From hence we travelled eighteen miles over a woody and uninhabited country, during which space we crossed three other small rivers, which are also branches of the Elk, but less considerable than the first; and arrived at Frankfort, leaving, at three miles distance, a wretched inn, the only one to be found between this place and Lexington.

*Recapitulation of the distances from Limestone to Frankfort :*

	Miles,
From Limestone to Washington . . .	4
— to North Licking Creek . . . . .	3 $\frac{1}{2}$
— to Lee's Creek . . . . .	3
— to Mazelaek Tavern . . . . .	1
— to Johnston's Fork . . . . .	5
— to Blue Lick . . . . .	8
— to Miller's Burgh . . . . .	12
— to Bourbon . . . . .	8
— to Lexington . . . . .	19
— to Frankfort . . . . .	22
Total . . . . .	<hr/> 85 $\frac{1}{2}$ <hr/>

Frankfort is situated on the right side of Kentucky River, in a bottom surrounded with heights, across which the waters have opened a passage ; the banks on each side of the river are often bordered with cliffs from two to three hundred feet in height : there are, however, small intervals between the heights, which form vallies. Amidst these irregularities, and in one of the vallies on the right, is the town of Frankfort, which has a very picturesque aspect. Kentucky River is navigable ten months in the year for the largest boats, as far as the Ohio : this

great advantage to trade has already determined a great number of merchants to establish themselves at Frankfort; and it is probable that in ten years this town will have twice the population and wealth of Lexington.

The whole of this part of the State of Kentucky is in general hilly, but without mountains. One peculiarity in the quality of the lands, and which perhaps does not exist in any other part of the United States, is, that those situated on the summits are much better, and have greater depth of loam than these in the vallies: these fine lands have, however, one very bad quality; they produce naturally no herbage, or very little, fit for pasturage; there is not the least appearance of twitch-grass; and clover, so common in every other State, is here very rare: this inconvenience obliges the farmer to form artificial meadows, which is attended with great expense, and a loss of time which is peculiarly precious to new settlers. It must, however, be observed, that when once these artificial meadows are in crop, they produce a third more than others, and those especially which are sown with trefoil are extremely fertile.

Among the agricultural productions, that which engaged our attention, and which undoubtedly is the most interesting, was the article of hemp: in this part of the continent, it appeared to us in general to be badly dressed,

very coarse, of a black color mixed with a grey tint, and moist to the touch: on inquiring the cause of this inferiority, we were informed by the most intelligent farmers that it arose from local circumstances, of which the following is the explanation.

The lands in the Western States are so extremely fertile, and the vegetation so strong, that the stalk of the hemp grows to an extraordinary height and prodigious bulk, and with such astonishing rapidity, that it seldom comes to perfect maturity. On examining the stalks at the harvest, it is found that they remain green more than six inches above the root, though the upper part is yellow; and being pulled in this state, according to the European custom, they preserve their vegetable moisture, which renders them liable to fermentation. The cables manufactured with this kind of hemp, although thickly covered with pitch, constantly swell, rot, and break; and so great are its defects, that notwithstanding the proximity of the Havannah, and the demand of the Spanish marine for this article, orders are given to receive no more of this hemp into the storehouses of His Catholic Majesty.

The State of Kentucky, justly alarmed at the discredit into which so precious a branch of industry had fallen, lately named a commission to inquire into the means best fitted to remedy this great defect. The Commissioners

stated in their report, that until the air and the sun had had time to dry up that excessive moisture which is common to lands newly cleared, and ripen them, it was indispensable, instead of pulling the hemp, to cut it five or six inches above the root, in order to suppress the noxious part. Experience has fully justified this new mode of proceeding ; and the Chamber of Representatives passed a law, declaring *that all hemp, not cut conformably to the new regulation, should neither be reckoned saleable nor be exported.*

The population of Kentucky has not augmented for two or three years past: the dearness of land, and especially the uncertainty of tenures, which keeps purchasers in endless lawsuits, and frequently exposes them to be put out of possession after the expenses they may have incurred in clearing and cultivating, have prevented emigrants from settling in this part of the country, and led them to prefer the north-west territory, where the land is equally good and better watered, and where the titles are indisputable. Several inhabitants of Kentucky have taken this resolution ; and if the federal government do not adopt measures to put an end to this multitude of claims, this State, far from augmenting, will decrease.

The different points to which the emigrants, at present, direct their attention, are---First, the Genesseys,

situated on the back of the State of New York; Secondly, the Western States, such as Kentucky, the north-west territory, and Tennessee: of these different States, the most in favor at present is the last.

The States which furnish most emigrants are those of the east; some from the centre, such as Jersey and Maryland; and almost all those of the south, in a greater or less degree.

The emigrants of the Eastern States establish themselves in general on the Ohio; but as many in their journey traverse the Genneseys, the beauty of that country, and the facility of communicating with the ocean by the inland canals,\* lead them to settle there; and this accidental increase of emigrants, together with those who go for the express purpose of forming establishments, makes it probable that the State of New York will be, of all such as have lands in the back settlements, the first peopled; and this period cannot be more distant than ten years.

The emigrants from Jersey and Maryland take their direction also towards the Ohio, but follow the lower roads from Philadelphia and Baltimore, which join both at

\* The Mohawk River traverses the Genneseys, and throws itself into the Northern River, and this river into the sea.

Pittsburgh and on the Monongahela: they commonly spread themselves on both sides the river, as they descend the Ohio; but it is observed, for these two years past, that they settle rather on the right than the left, particularly on both the Miamis, the Muskingum, the Great and Little Scioto, the Wabash, etc.

Those who emigrate from Virginia and North Carolina go to Kentucky; Tennessee is furnished from both the Carolinas and Georgia.

The mass of this population is divided into three classes, each of which, placed in different lines, have their respective departments; and according to their occupation, fortune, and particular character, may be ranked under the following denominations.

The first class, called *Forest Men*, holds the first line on the side of the Indian nations; these, properly speaking, are Nomades, who do not cultivate lands, and who have no other employment than hunting, making excursions into the woods, and trafficking with the Indians: they often pass whole years amidst deserts, and have no fixed abode: a hut, covered with the bark of trees, and supported by two poles; a large fire placed on the side of the opening; a great blanket, in which they wrap themselves up when they sleep, placing their feet towards the fire and their head in the cabin; these are all that is necessary

to shelter them from the inclemency of the weather, and to pass the longest and severest nights. When they perceive that the game diminishes, and that the increase of the population requires the establishment of a court house, they retreat forty or fifty miles farther back, to find what they call better means of living and more liberty, "wishing" add they "to have nothing to do with justice."\*

The next class to the Forest Men is that termed the *First Settlers*, who form the second line. Although these have much analogy with the first, they are, however, more fixed, depend less on hunting for subsistence, rear cattle, clear certain portions of land, but never more than they need; and as they are less vagrant, they are more careful in the construction of their habitations: their dwellings are a kind of small block-houses, larger at the top than the bottom, with crannies above and below, and surrounded with a great palisado twelve feet in height: these block-houses are built with trunks of trees, the intervals between which are filled up with clay mixed with chopped straw; the roof is covered with bark or boards: the chimney consists of a pile of stones placed at the extremity of the apartment, in the roof of which is a hole for the smoke;

\* "There is but one thing I fear on earth," observed one of these wanderers to me, "and that is what men call their laws and their justice."

and another hole is made in one of the sides of the house, which serves for the admission of light, and is of course the window. In winter an immense fire is burning day and night; in summer a continual smoke is necessary, as a defence against the moschettoes, with which the woods are commonly filled: the same precaution is taken for the cattle, by collecting in the pasturages, or some other place that is cleared, branches and dead leaves, which are covered with earth after they are set on fire, and where the animals never fail to go and lie down every evening, in order to keep themselves from the insects. A great quantity of hogs are reared, not only as useful for the wants of the family, but as one of the speediest means of destroying serpents and other reptiles.\*

These First Settlers often excite the vengeance or cupidity of the Indians, who sometimes go and attack them in their dwellings. In such rencounters, the American defends himself with courage; his wife does not hesitate to take a musket, and, placed by his side at one of the crannicks, fires on the invader; the children also take part

\* The hogs are very fond of serpents; they generally catch them by the tail, and eat them successively as far as the head, which they are careful to let drop; meanwhile the serpent twines around the hog, and bites him on the right, the left, and every part of the body, without however doing the least injury to the animal.

in the engagement. As long as the savages fail in surprising these kind of houses, or in setting fire to them,\* their attack is in general fruitless, and the American remains unassailable; but he is then condemned to remain shut up for whole months for fear of being surprised, or until by presents and negociations he has appeased the rage of his enemies and made peace.

These First Settlers remain in general but four or five years on the same spot; after which, the population continually increasing, they make way for the *Great Settlers*, who form the third line and are the real husbandmen; from these they obtain certain indemnities, not for the purchase of the land, which in general does not belong to them, but for the slight clearings which they have made, and also as the price of their friendship.

The Great Settlers are composed of good farmers, emigrating from the different States, as we have already mentioned; and who, having too numerous a family, go back to look out for other lands of greater extent, and at a cheaper rate, in order to settle each child on a different farm. But from the independence which his little fortune

\* The Indians set fire to these dwellings, by tying to their arrows a piece of dry bark which they set on fire, and which, shot into the roof, puts it immediately into a flame.

gives him, he is prudent, and looks to his own security as well as to that of his family. He takes care not to settle too close to the Indians, but puts his property under the protection of the laws, and places himself, therefore, in the third line; that is, in a spot where the population is sufficiently great to require a civil organisation.

When the great settler has taken possession of his new lands, the block-house of his predecessor is soon destroyed, and a good wooden house is built in its place. He forms his homestead, clears larger spaces of ground, lays out meadows, plants orchards, and lives in security, plenty, and happiness.

It is easy to conceive that the children of such men, accustomed early to hunting, to distant courses, to felling trees, opening roads, and braving the inclemencies of the seasons, become themselves soon in a state to form establishments, and to acquire that love of liberty, that honorable pride, which belongs to every man who owes his happiness, and that of his family, only to his own industry and labor.

Such men must also be endowed with a considerable portion of courage, be capable of the hardest undertakings, and find no obstacles in deserts or mountains; and if we add to these physical qualities that noble and sublime sentiment of independence with which they are

penetrated, it ought to excite no astonishment, if, in a military point of view, we consider them as the class of men in America best fitted for war. It is, therefore, only among such that we find traces of the austere and simple manners of their ancestors, that hospitality which heretofore formed the ornament of the Old States, and where we might still dare pronounce the name of liberty. Arbitrary laws have no authority over these people; men who can satisfy themselves with the enjoyment of their primitive rights, and with a certain subsistence, have need only of their will and their courage in order to remain free.

Kentucky is filled with old forts, on the origin of which the inhabitants entertain but very vague notions; and as their forms leave no doubt but that they were constructed by Europeans, our astonishment redoubles when we reflect what kind of men must have been those, who penetrated so far inland, amidst desert regions, far from rivers and every kind of navigation, without roads, without means of subsistence, and amongst the most savage nations, such as were the Delawares.

The fort, which we sketched at the time, is situated between Lexington and Frankfort, nine miles distant from this last town, and on a small river, called Elk River.

On examining it with attention, we thought at first that the ditch was the remains of an old channel, opened to bring the water for the use of some mill, at the time the first settlements were made in these countries; and it was only after making the tour that we were convinced of our mistake. The six fronts, which form an irregular hexagon; the parapets behind the ditch, and which, notwithstanding the length of time, are still very easily to be traced on the ground; the entrance which is covered by two small turrets on a little eminence, which commands the fort at a slight distance; a kind of small horn work; and a redoubt placed in front of the fort, are circumstances which leave no doubt that the work was constructed by Europeans, and even by persons well versed in fortification.

The difficulty of explaining how military men could, against all kind of rule, according to the modern principles of fortification, place this fort in a hollow, commanded on all sides, was the most embarrassing circumstance in our hypothesis. But upon reflecting on the kind of war which the Europeans had then to sustain against the natives, unprovided with fire-arms, never warring but by stratagem or surprise, and always in the open field, we thought it probable that the choice of this place had been determined by the river Elk, the fine and healthy

waters of which were made part of the defence, by turning them from their natural bed into the ditches, where the soldiers might daily draw their water without exposing themselves to be massacred, particularly by the natives who surrounded them, in going without the fort. It is certain that the waters of this river entered by one of the extremities of the fort, and emptied themselves by the other; and there are still to be seen the remains of dykes, which were meant to retain the water when it was too low.

We endeavoured to procure some information respecting the nation, which at so remote a period could have erected such works as these. The received opinion in the country is, that they were constructed by the Spanish General De Soto, who made, about two hundred years since, an excursion on the left bank of the Mississippi, and who penetrated so far into the country that he was obliged to winter there with his army; but the Spanish historian who records this fact, states as positively that he never passed the river Tennessee. We are led rather to believe that these forts were built by the French at the time they were in possession of the course of the Ohio, when they penetrated into this part of Kentucky to carry on the fur trade; and that knowing the perfidy of the nations which inhabited this country,

they constructed these forts, to shelter themselves from the attacks of the Indians. We were confirmed in this idea by observing, that from this fort, in a straight line, and across the woods, it is not above sixty miles to the Ohio. These forts, it must be remarked, are constructed only with earth, and without any masonry or stone-work whatever.

A convenient situation for commerce is the principal point on which the riches and happiness of a state depend. A great prejudice, in this respect, exists against the Western States. I own that when I arrived in these countries, I had myself adopted the erroneous opinion, that there is no better way for the conveyance of goods into these states than by Philadelphia and Baltimore to Pittsburgh, and from thence down the Ohio ; and that on account of the difficulties and expense attending this conveyance, the goods would be always too dear.

But better informed on this important question by the exact researches which I made on the very spot, I was convinced, as the following table will show, that this opinion was the effect of ignorance, or of the policy of the merchants of Philadelphia or Baltimore, who are interested in the support of this error.

## A COMPARATIVE TABLE

*Of the expense of conveying merchandise to Upper Louisiana, and the Western States of America, by following the course of the Mississippi; and of the price of carriage into the same countries, by the way of Philadelphia and Baltimore, as at present practised.\**

## FIRST COMPARISON.

*By Philadelphia or Baltimore to  
Knoxville, the capital of Tennessee.*

From Philadelphia or Baltimore to Pittsburg, situated on the head of the navigation of the Ohio, the distance by land is 520 miles, and requires 60 days for a waggon to go and return. The expence per hundred is 5 dollars, or for 25 tons, doll. 2500

From Pittsburg to Knoxville, the distance by water is calculated at 1300 miles, which requires 130 days for a boat to go and return; which boat, containing 25 tons, has usually 10 men at one dollar each per day, 1300

Total expence for 25 tons by Philadelphia or Baltimore through Pittsburg to Knoxville, going and returning . . . . dollars 3800

*By New Orleans to Knoxville, the  
capital of Tennessee.*

From New Orleans to the junction of the Ohio with the Mississippi, the distance is estimated at 1200 miles. The time to mount the river and return is 90 days, with a boat, containing 25 tons, and 20 men, whose wages at one dollar each per day is . . . . . doll. 1800

From the mouth of the Ohio to Knoxville, the distance is 650 miles. The time for a boat to mount and return is 65 days; which boat, containing 25 tons and 10 men, at one dollar each per day, is . . . 650

Total expence for 25 tons by New Orleans to Knoxville, going and returning, . . . . dollars 2150

Difference in favor of the transport by New Orleans, 1550 dollars, which is nearly 56 per cent.

Saving of time, 35 days.

\* For this purpose let us suppose two vessels of equal tonnage, and the same kind of merchandise, to sail from Bourdeaux or London; the one for

## SECOND COMPARISON.

*The comparative expense of transporting merchandise by New Orleans or by Philadelphia and Baltimore to Upper Louisiana.*

*From Philadelphia to St. Louis, the capital of Upper Louisiana.*

From Philadelphia to Pittsburgh the transport by land of 25 tons will cost, as before calculated,      doll. 2500

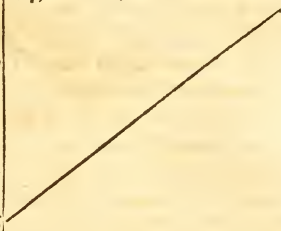
From Pittsburgh to the junction of the Ohio with the Mississippi the distance is calculated at 1300 miles, which voyage up and down the river is made in 60 days, by 10 men to the 25 tons, at one dollar each,      600

From the mouth of the Ohio to St. Louis is 120 miles, which requires 15 days to mount and return with a boat of 25 tons and 20 men, at one dollar each,      300

Total to go to St. Louis and return to Philadelphia,      dollars 3400

*From New Orleans to St. Louis, the capital of Upper Louisiana.*

From New Orleans to St. Louis the distance is 1450 miles; a boat with 25 tons and 20 men makes this voyage, mounting and returning, in 100 days, at one dollar each per day,      dollars 2000



Economy in favor of transport by New Orleans and the Mississippi, 1400 dollars, which is nearly 45 per cent.

Saving of time, 55 days.

Philadelphia or Baltimore, which are at present the depots for such European goods as pass into the western country, the other for New Orleans: which of these cargoes can be transported the cheapest into the Western States and Upper Louisiana?

In these calculations, the expense of carriage by Philadelphia or Baltimore and Pittsburgh are estimated only at five dollars the hundred weight, but the common price is from seven to ten dollars; we paid ourselves as much as eight dollars, which is still in favor of the Mississippi.\*

\* While we are employed in detailing circumstances relative to this immense and interesting river, events have taken place which will remove every rivalry to its commerce, and render it one of the most animated scenes of the industry of man. Of these events, the first is the cession of Louisiana to the United States of America, which secures a free and indisputable navigation throughout the whole length of the Mississippi to the gulf of Mexico: this, with the confidence which the free, mild, and equitable government of America inspires, will draw a great mass of population from Europe, and even the northern states of America, to Upper Louisiana and the borders of the Mississippi: with the increase of population, the produce of industry and mercantile enterprise will augment; and a more general and variegated commerce will be introduced into the country than is now practised. Such increase of the articles of trade will stimulate a desire to expedite the transfer from New Orleans to the interior country, and render it less expensive; hence one of the first cares will be to improve the navigation of the river.

The second event is the late successful experiments which have been made for navigating boats by the power of steam engines, and which is particularly advantageous to the Mississippi and other long rivers of America. The length of time and greatness of expense which are required to ascend the Mississippi, is not owing to the rapidity of the stream, but to the necessity of using men to row or haul the boats; that river running through a country

With respect to the difficulties in going up this river, we think we have sufficiently proved that they are chimerical; this passage, moreover, is practicable at all seasons, and without any carrying places with barges of

yet uncultivated, has its margin covered with forests and marshes, or bordered by stupendous rocks and cliffs; so that as yet horse-paths for hauling boats are not made, and perhaps cannot be made for a great number of years: horses, therefore, cannot be used to aid navigation as on the rivers in Europe; hence the work is performed by men, which is the most imperfect mode of navigating rivers, in consequence of the expense of men and their feeble powers, compared to horses. The daily expense of a man is equal and usually more than the daily expense of a horse, while the power of the horse is equal to five men in ordinary labor; but compared to men who row a boat, and take their purchase on the water, while the horse has his purchase on land, one horse is equal to twelve or fifteen men, and two horses would certainly draw a twenty-five ton boat much faster against the current of the Mississippi than such a boat can now be navigated by twenty-five men. Consequently, if horses could be used as in Europe, the expense of transport would be diminished more than one half. But the navigation must continue to be performed by men, and the inhabitants of that beautiful and fertile country must labor under the present heavy and discouraging expense of the navigation, until science produces some better mode. This we feel confident will be effected by the steam boats; the experiments made in the month of July, 1803, on the Seine, near Paris, on a boat containing an engine of eight horses power, has been on a scale sufficiently large to exhibit the powers and expense of such a machine, and reduce them in all cases to mathematical demonstration; and it is found, that on all rivers, such as the Mississippi, where horses cannot be

an hundred and twenty thousand weight; whilst by the way of Philadelphia, the badness of the roads, and the difficulty of crossing the mountains, admit only of four or five horses to a carriage, and of carrying no more

used, and where the expense of fuel is little more than that of cutting or collecting it, the steam boats will diminish the expence of transport at least one half, and economise one third of the time.

Such an improvement of the navigation, and powerful aid to the industry of man, will give vigor to enterprise, and open scenes of activity at present not contemplated, by transporting the ponderous articles whose value is not sufficient to bear the expenses now incurred, and by drawing remote parts into a nearer connexion with each other. Such a facility of transport will present a new inducement to settling in Louisiana, and again add to the produce of labor and commerce of the river. The inhabitants have, therefore, the pleasing perspective of soon seeing their navigation conducted at as cheap a rate as on the rivers in Europe, and the Mississippi, like a liquid highway, carrying down the various produce of the different climates from the fiftieth to the thirtieth degree of northern latitude, and in exchange return the necessaries and even luxuries of the Old and New Worlds.

In speaking of the Mississippi there is a good opportunity of making two striking and important comparisons.

First, on the importance of free navigation: in comparing the Mississippi with the Danube, which has its head waters in Suabia, but passes Bavaria, Austria, Hungary, and Turkey, which being rival powers, each one when they think proper can stop the navigation of their neighbour at their boundary; and thus the people on its head waters and Hungary, derive little advantage from its navigation; the inhabitants of Louisiana are much more

than five and twenty hundred weight. At some periods, also, such as the falls of snow, this communication is totally interrupted; and when to these inconveniences are added the still greater of loading and unloading, of warehouse, the expense and loss of time, and the accidents to which goods are more or less liable by way of Pittsburgh; we shall be convinced that the conveyance by New Orleans must obtain a decided superiority.

fortunate by possessing the whole course of the river. Secondly, comparing the Mississippi with the river Amazonas in South America: the Amazonas runs directly from west to east, and gives the same kind of produce throughout the whole of its length, therefore never can have a great interior commerce. On the contrary, the Mississippi runs from north to south, and mingles the tropical productions with the furs of the north; every hundred miles gives new and varied productions, and this circumstance, with a free navigation, will render that river one of the most active scenes on the globe.

*(We are indebted for this Note to Mr. Robert  
Fulton, at Paris.)*



## CHAPTER IX.

*Continuation of the description of the Ohio.—Lawrence's Creek.—Eagle Creek.—Red Oak Creek.—Lee's Creek.—White Oak Creek.—Braking Creek.—Hot Creek.—Well Creek.—Selma Creek.—Observation.—Wild Turkeys.—Little Miami.—Cincinnati.—Licking River.—Fort.—Indian works.—Mill Creek.—Sym's Station.—Observation.*

**LEAVING** Limestone we proceeded four miles, and reached Lawrence's Creek on the left; immediately below which is a sand bank that extends from the mouth of the creek to half the channel of the river. This bank is dangerous only when the waters are neither too high nor too low; being, when too high, covered with a sufficient quantity of water, and when too low, quite bare. By steering to the right, you are sure of finding twelve or thirteen feet of water when it is at the lowest, and twenty when the bank is covered.

Two miles lower, on the opposite bank, is another creek, called Eagle Creek; which having passed, the chain of heights falls off on the right, and that on the left draws nearer; without ceasing, however, to run parallel with each other.

Three miles farther, on the right, another creek empties itself into the river, called Red Oak Creek, which is omitted in every chart.

Two miles and an half below Red Oak Creek, on the left, is Lee's Creek, marked too much to the east on Hutchins's map.

A mile below Lee's Creek is a fine establishment lately formed, called Lee's Station, which contains five or six houses.

Opposite Lee's Station, another small creek empties itself into the Ohio, called Strait Creek. From Red Oak Creek to Strait Creek the water is from eight to twelve feet deep, and the navigation good.

After quitting Lee's Station and descending three miles, we passed, on the right, White Oak Creek. In this passage it is necessary to keep to the right, to avoid a considerable alluvion which is situated on the left, opposite to the mouth of the creek; and which is so much the more dangerous, as it is never uncovered even in low waters; in the channel the depth is ten feet.

About three miles from White Oak Creek we passed, upon the left, Braking Creek. The space on the left between this last and Lee's Creek is much inhabited; but as the heights on the opposite side almost close upon the banks of the river, leaving but a narrow strip of plain ground, this side is literally a desert.

Three miles lower down on the right is Bull's Skin Creek, and three miles farther on the left Locust Creek. Here the heights fall off and diminish; those on the left leave a considerable space of low land between them and the river.

The navigation from White Oak Creek to this point is excellent, and without any embarrassments; the depth of water is constantly twelve feet.

Hot Creek empties itself into the Ohio three miles below Locust Creek.

In the course of the next four miles we found several ravines on both sides, which are dry in summer, and came to a great bend which the river makes towards the north.

After passing this bend, the river takes a straight direction, without any sinuosity, for the space of nearly twelve miles; at the end of which we found two creeks, directly opposite to each other. That on the right is called Twelve Miles Creek, and that on the left Well

Creek. The whole of this space is uninhabited, and without spring water; the left particularly is extremely barren; the greater part of the rivulets marked on the chart being dry during the summer. The navigation continues excellent, and the depth of water is every where from ten to fourteen feet.

Three miles and an half below these two creeks, we left on the right a very small creek, called Nine Miles Creek, which is dry during the summer.\* Five miles further on the left is Selma Creek.

Excepting a few huts belonging to hunters, from Locust Creek to Selma Creek, the whole distance, which is about thirty miles, was entirely uninhabited. The depth of water is from ten to twelve feet.

In these deserts we saw a multitude of wild turkies, and in such numbers that the trees were literally rendered grey. They are easily to be approached and even killed; but to shoot several, it is necessary to begin with such as are on the lowest branches; the rest do not move, and the whole may be killed in succession by following this method. On the contrary, in firing among those which are at the upper part of the tree, the falling of the birds

\* Whenever nothing is said respecting the navigation of creeks, they are always to be considered as not navigable.

through the branches frightens the rest, and makes them take flight. Having, from ignorance, fired into the middle of the tree, I was severely reprimanded by the hunter; but his talent in the art of counterfeiting the voice of every kind of game, soon made amends for my mistake. Placing himself immediately beneath the same tree, he imitated so perfectly the noise of the cocks, that in less than half an hour the tree was covered with turkies, which gave us easily the means, by following his instructions, of killing enough for the whole crew.

This bird, in America, is of a singular size and beauty. Among those we killed we measured some which were three feet from head to feet; the feathers of the body are of a fine ashy grey, and those of the neck and under the wings of a copper color. When exposed to the sun in a certain direction, the plumage is brilliant as gold. Though this bird was excessively lean, it weighed thirty pounds and an half; and I was assured that in the autumn, when they are fattest, some weigh from forty to forty-five pounds. The difference between the turkies of America and Asia, is that the former have longer necks and legs than the latter, and no black feathers on their bodies.

After passing Selma Creek, the aspect of the country changes a little; the heights on the right fall off sufficiently to leave tracts of fine low ground, while those on

the left close upon the river. The country is no longer a desert, and a great number of new settlements are formed on the right.

From Selma Creek to the Little Miami River, at the confluence of which is Columbia, we reckoned four miles.

The spot on which Columbia is situated had been originally destined to form a town; but after having settled several farms, traced the plan of the town, and formed other establishments, so violent an inundation took place in 1794, that notwithstanding the great elevation of the banks, which are more than forty feet above the ordinary level of the river, the water rose six feet higher, entered into the greater part of the houses, and carried several away. The idea of building a town in this place was then abandoned, and the great establishment of Cincinnati was projected nine miles below. Four or five houses are all that now remain of the town of Columbia.

Little Miami River is from sixty to eighty yards wide at its mouth; its banks are extremely steep and almost perpendicular. It runs on a muddy bottom, formed of sand and clay, is navigable only for small boats, and that only in high waters: the navigation in ordinary seasons is intercepted by a multitude of great rocks, which often form strong currents or falls. The lands which this

river waters near its mouth, are subject to inundations for the space of seven miles, when the country becomes hilly, and the soil rocky and stony. The whole of this space is in general without springs, and those which are found near the banks are brackish.

On the same side on which Columbia is built, is a sand-bank adhering to the side of the river, filling up half its bed, and covering nearly forty acres. On reaching Little Miami it is necessary to keep on the left side, at the distance of fifty yards, where there is four or five feet of water; nearer to the left the water becomes deeper, and is from ten to twelve feet, close to the bank.

At some distance from Columbia the river makes a great bend towards the west. The salient point is formed by an alluvion, which it is highly necessary to avoid, by keeping to the right, where the river is nine or ten feet deep. After passing several neat habitations, we reached Washington or Cincinnati.

Cincinnati is situated on one of the finest spots in America; the ground on which this town is built rises gently from the banks of the river. On the opposite shore falls the river Licking, which waters a part of Kentucky; at its mouth a small town has been lately built, called Newport, and which will be the depôt for all goods coming down from Licking. The view of this town and

the course of the river present the most pleasing perspective from Cincinnati.

Behind the town of Cincinnati, and on the height, is an old fort with four bastions, built of wood, which was abandoned and become useless after the treaty of peace made with the Indians; the frontier line having been carried very far back into the country.

At the extremity of the town, in the western part, is an Indian building, having the form of a rotundo. Here the Indians held their councils, made their sacrifices, and celebrated their feasts. If we may judge from the size of the trees which have grown up since its construction, this senate-house must be very ancient.

Had it not been for the persecutions with which we were menaced by General Waime, who had received orders to arrest us, we should have taken a plan of this building; but it was prudent to keep ourselves on our guard, and depart as speedily as possible.

The town of Cincinnati, which was begun only five years since, contains already three hundred families; this sudden increase it owes to the abode of the army.\* The spot offers no advantages for commerce; and it is probable

\* This army was composed of fifteen hundred men, commanded by General Waime, and destined to act against the Miami Indians.

that when the army shall have left this place, whatever industry it possesses will be carried to the little town of Newport, which, by means of the navigation of the Licking, offers every kind of advantage for trade.

The lands on both sides of the river are of the finest quality, and being more than sixty feet above the ordinary level of the water, are entirely out of the reach of inundation.

From Cincinnati to Mill Creek is two miles and an half. In this space the heights, which generally run along the Ohio, fall off to the north and south, and leave a wide extent of level ground, the fertility of which continually invites emigrants to settle. Both sides of the river are already well inhabited. The navigation from Cincinnati to Mill Creek is excellent, with ten or twelve feet of water.

At Mill Creek the two chains of hills close in again on the banks of the river, and leave but little extent of level ground. After eleven miles of very excellent navigation, with a depth of water from nine to fifteen feet, and passing several ravines which are dry during the summer, we reached Syms's or North Bend Station, situated on the right side.

Colonel Syms is the greatest proprietor of land in the north-west territory, and if the possession of a vast desert

is what constitutes wealth, he is certainly one of the most opulent men in the Union. He has collected on this spot a number of poor families, to whom he has sold lands with reserve,\* and has already traced the plan of a town, which is to be called North Bend. The river makes a very considerable curve in this place.

We saw here, for the first time, several small paroquets of the green species, with yellow necks. We were surprised to find this bird in so northern a latitude; but the inhabitants informed us that these paroquets were never seen but during the summer, and that at the approach of autumn they disappeared altogether.

The navigation from Syms's station continues excellent; the depth of the water is from ten to twelve feet during six miles, when we reached the river of the Great Miami, having passed in our course a few habitations on the left. The right bank immediately below Syms's Station is commanded by heights, which at the end of two miles fall back and leave a large tract of level ground extending as far as the river of the Great Miami.

\* We shall explain in the chapter which treats of the policy of the Federal Government, the meaning of selling with reserve.

## CHAPTER X.

*Great Miami.*—*Tanner's Creek.*—*Hogann's Creek.*—*Woolper's Creek.*—*Omission.*—*Big-bone Creek.*—*Observation.*—*Steel's Creek.*—*Elk Creek.*—*Craig's Creek.*—*Nine Mile Creek.*—*Error in Hutchins's map.*—*Kentucky River.*—*Little Kentucky.*—*Omission.*—*Eighteen Mile Island.*—*Twelve Mile Island.*—*Harrod's Creek.*—*Middle Island.*—*Beautiful prospect.*

THE Great Miami is from two hundred to two hundred and forty feet wide at its mouth, from whence, for the space of fifteen or twenty miles, it is obstructed by a multitude of large trees and sand-banks, which render the navigation extremely difficult. It deposits a part of these incumbrancies in the Ohio, which obliges the navigator on that river when he passes before the mouth of the Great Miami, to use great precaution in order to avoid those dan-

gerous shoals. This is effected by steering towards the left before reaching the mouth of the river, where a great sand-bank adheres to the right side, and which is easily recognised by heaps of immense trees piled one upon another, and never entirely covered. The channel during the space of half a mile is in the middle of the bed of the Ohio, after which it is necessary to steer to the right to avoid a bank of clay which joins the land on the left, and extends as far as the middle of the river. This bank is so much the more dangerous, as it can only be discerned in seasons of great drought. By following the track we have indicated, twelve or thirteen feet of water may be found.

After having passed the Great Miami, the country becomes extremely flat, particularly on the right, where the mountains disappear altogether. They lessen also on the left, but are still descried. The quality of the land is extremely variable, sometimes sandy, sometimes mixed with gravel, but generally bad. The trees are small and stunted.

A considerable creek, called Tanner's Creek, discharges itself into the Ohio on the right, three miles and an half lower than the Great Miami. It is marked on Hutchins's map as if it were only a rill; it is nevertheless forty-five fathoms in breadth, and is navigable for canoes

thirty miles above its mouth; it flows through low lands which are extremely fertile.

A mile and three quarters below Tanner's Creek we left on the right a small creek, called Wilson's Creek; and another a mile further, omitted altogether on Hutchins's map, called Hogann's Creek.

From the Great Miami to this spot the navigation is every where the same, without impediment, and from twelve to fifteen feet of water. The mountains on the right close in towards the bank, whilst those on the left, which are somewhat higher, fall back.

Opposite Hogann's creek, on the left, are two small sand-banks, which are dry when the waters are low; these may be easily avoided by steering a little to the right, where the soundings give twelve feet of water.

Immediately after passing these two sand-banks, we reached, on the left, Woolper's Creek, which is navigable ten miles for canoes. On the right side opposite is another small creek, called Lohory's Creek: these two last are three miles from Hogann's Creek.

Three miles below Woolper's Creek we left on the right an island, not noticed in any map, and of which we made the tour, in order to ascertain the fact, and to avoid mistakes. The channel on the right is practicable

only when the waters are high, having a sand bar across it; on the left there is every where twelve feet of water.

We named this island Paroquet Island, on account of the immense number of those birds which are found upon it. Here the Ohio makes considerable windings, and its banks, which strongly hem in the river, are quite uninhabited.

Seven miles below Paroquet Island, and on the left, is Gunpowder Creek; and a mile and a quarter lower, Landing Creek, which we passed on the left, and proceeding two miles further reached Big Bone Creek.

Although this creek appears more considerable than others on the chart, it is only navigable in very great freshes. When the water is at its ordinary height, the rocks with which the bed is filled, form falls and cascades; in summer it is almost dry.

Big Bone Creek is celebrated for the enormous size of the bones found on its banks, which bones must have been those of some animal infinitely greater than any of those known in North America. There is no doubt that such an animal has existed, but we know nothing of its origin, character, or species, respecting which so many fables have been invented by ignorance.

Determined to judge from the evidence of our own

senses, we repaired to the spot where these bones are found in the greatest quantity, accompanied by three men, provided with tools fit for digging.

After traversing the woods six miles, we came to a great salt marsh, near which is a small salt manufactory. We were desirous of seeing the bones, but there were none above ground. Mr. Carnel, proprietor of the manufactory, led us back to the salt marsh, where he assured us we should not fail of finding them. We worked during three days, and obtained twenty-four pieces of bone of different sizes, of part of which the following is a description.

1. A piece of the lower jaw-bone, containing two teeth still well fixed; this piece is one of the most curious which we brought away: the portion of jaw-bone and the teeth weighed sixty-four pounds. One of the teeth was remarkable for six great points, extremely sharp, growing out from the extremity; the other close to it was, on the contrary, extremely flat, resembling those of animals that chew the cud.

2. The extremity of an eye-tooth, and which from its figure and proportions appears to have been the sixth part only of a whole tooth; this seemed to have belonged to a carnivorous animal.

5. A tusk, four feet three inches long, of a flat and crooked figure, and somewhat rounded at the extremity.

4. Three bones making part of a fore leg; the shank; the bone from the knee to the shoulder; and the shoulder blade to the withers; which three pieces joined together were twenty-one feet three inches in length. Supposing this length augmented by the foot and the flesh which covers in general the withers of quadrupeds, we may form an idea of the size of the animal. We could not carry away these three last pieces on account of their weight; the others we carried with us to Philadelphia. No trace or vestige whatever of the foot of this animal remains; these bones were found only in the marshes, and at a depth not exceeding four or five feet.

I shall not here notice all the absurd stories which were related to me respecting the causes of the destruction of this animal; what appeared to me evident was, that neither the whites nor the natives could give any satisfactory account respecting either its existence, or the places where its bones are found.

The only probable conjecture is, that these animals were attracted hither by the salt water; that the Indians, placing themselves in ambush, killed them on these spots, and taking what they thought proper of their flesh, left

their bodies to putrify in the air. The mud and sand having in process of time covered the remains of the animal, the bones were preserved by the salt water. The slight depth at which they are found renders this conjecture highly probable.

A little below Big Bone Creek, and on the opposite side, is a sand-bank, which may be avoided by keeping to the right.

Two miles and a quarter from Big Bone Creek, we passed on the left Steel's Creek; the country on both sides is very flat.

Five miles and an half lower on the left side, and in the hollow of the bend of the river, we found a considerable creek without a name. The navigation from Big Bone Creek to this spot is excellent, and the depth of water every where from thirteen to fifteen feet.

At the bend of the river, immediately after the creek, is a small sand-bank, which is dry; it is but little dangerous, since it does not extend very far into the river, and is very easily discerned when the waters are low. The depth of water opposite the bank is ten feet.

We proceeded seven miles further, during which space the navigation is excellent, with never less than from ten to twelve and twenty feet of water, when we

reached a creek on the right, called Elk Creek. The mountains alternately fall back and close upon the river; the country appeared in general hilly; the lands are poor, and totally uninhabited.

Opposite Elk Creek, on the left bank, is Craig's Creek. After passing this last creek, the mountains disappear, especially on the right side, where none are to be seen. We descended twelve miles along the same desert country, and reached M<sup>c</sup>Cool's dwelling, which is a small hut, situated on the left side. The navigation continued excellent, and the depth of water invariably from fifteen to twenty feet.

At a small distance on the left, above M<sup>c</sup>Cool's farm, the land is liable to inundation. Opposite this farm is an island, called Nine Mile Island, at the end of which, on the right, is a creek, named Nine Mile Creek. On this spot two islands are marked in Hutchins's chart; this is a mistake; we can certify that there is but one.

We left the island on the right, as the channel on the left is alone practicable, and in which there is fourteen and fifteen feet of water.

Five miles and an half below Nine Mile Creek, on the right, is Indian Creek. During this space there are a few new clearings on the left, but the right side continues uninhabited.

We passed Indian Creek, leaving on the left a small creek without a name. Six miles lower, and on the same side, is Kentucky River, at the confluence of which is situated Port William. This small town is built on a fine terrace, high enough to be out of the reach of inundations.

The appearance of the country from Indian Creek to Port William changes a little; the right side of the Ohio is lined by a small chain of heights, with gentle slopes; the lands are good, but uninhabited. On the left side the lands are low, and frequently swampy. The navigation from Indian Creek is excellent, with twelve to eighteen feet of water.

Two miles below Port William we passed on the right Little Kentucky, which is a creek navigable for canoes fifteen miles. Here the heights on the right entirely disappear, leaving a vast plain. On the left a number of small hills close upon the banks of the river.

We proceeded six miles, leaving on the left another creek, called Battle Creek, and reached Indian Kentucky Creek, situated on the right; beyond this creek the heights on the right side approach the banks, while those on the left run on at a small distance, but parallel with the river. We descended four miles between these slopes, and found two creeks, which empty themselves into the

Ohio, opposite each other. Three miles and an half below these creeks, we reached another creek, situated on the right, and which forms a kind of torrent. At the mouth of this creek is a sand-bank, which we left on the right.

Ten miles lower another creek empties itself on the left side. In the space of seventeen miles and an half, that is, from Indian Kentucky Creek, we passed on the left three rivulets, of which no mention is made in Hutchins's Chart; the country is altogether uninhabited.

A mile below this last rivulet we passed four creeks on the left, and one on the right, and reached an island, called Eighteen Mile Island. None of these rivulets or creeks, reckoning from Indian Kentucky Creek, are navigable, and they have no particular name.

During this space the country varies extremely; sometimes swampy, sometimes high and rocky, and in general without springs; the right side is destitute of water.

The navigation from Indian Kentucky Creek to Eighteen Mile Island is constantly good, the depth of water being never less than from twelve to thirteen and fifteen feet.

We passed this island on the left, taking care to keep at a small distance, it being surrounded with shoals. We

found in the middle of the channel ten and twelve feet of water.

At the extremity of the island two creeks, neither of which are navigable, empty themselves opposite to each other. We proceeded seven miles between two chains of heights, which line both sides and entirely hem in the river, and reached a creek on the right, which rolls over a bed of rock, and is not navigable. The other creeks marked on the chart are only ravines.

Immediately after passing the creek, the heights disappear; the banks for the space of twenty or twenty-four yards from the river are low and swampy, but the ground rising gradually, secures the inland country from inundations.

Two miles from this creek are two small settlements on each bank, and directly opposite each other. Two miles lower we left two ravines on the right, and reached Twelve Mile Island. From Eighteen Mile Island to this spot the navigation is constantly good, with a depth of water from ten to fifteen feet. We passed Twelve Mile Island on the left; the channel on this side being impracticable, while that on the right uniformly yields eighteen feet of water.

Four miles below Twelve Mile Island, on the left, a very considerable creek empties itself, called Harrod's

Creek, which we ascended twelve miles in the canoe, and found every where two, three, and four feet of water. The country it flows through is low, and liable in freshes to inundations.

A mile and three quarters below Harrod's Creek, and on the same side, is another creek not navigable, called Goose Creek, opposite which is situated Middle Island.

The navigation from Twelve Mile Creek to this spot continues excellent, with a depth of water from twelve to fifteen feet; although both passages are good, that on the left is preferable, having from ten to twelve feet of water, and at the end of the island from fifteen to twenty; that on the right being narrower, is liable at all times to be choked with drift-wood.

After passing the island, a most noble prospect presents itself to the view. The river, which is here considerably broader, winds majestically through an extent of beautiful meadow ground, covered with the softest verdure. These decorated banks are already inhabited by a number of planters; but the gentle current of the river is soon interrupted by the rapids below, which divide it into several branches, and change the soft murmurs of its waters into hoarse and plaintive sounds. These different streams, after freeing the obstacles which divided them, meet again, and separate no more till they reach the ocean.

The mountains now totally disappear, and fine low lands extending from the banks are covered with a multitude of neat habitations. On the right is a fort. On the horizon, and in the prolongation of the course of the river, is situated Louisville, which terminates this fine perspective; but the attention is powerfully seized by the hoarse and majestic noise produced by the rushing of the waters down the cataract. After having enjoyed this great and sublime spectacle for the space of eight miles, we arrived at Louisville.



## CHAPTER XI.

*Louisville.—Cassaña.—Stuben's Fort.—Clarksville.—Rapid.—  
 Sublime trait of character.—Temperature.—Salt River.—  
 Otter Creek.—Whyo-Pio-Mingo.—Falling Spring.—French  
 Creek.—Buck Creek.—Difficult Passage.—Windot's Creek.  
 —Blue Creek.—Dangerous Sand-bank.—Vines.—Helm's  
 Creek.—Dardada Island.—Bad passage.—Little Yellow  
 Creek.—Harden's Creek.—Error in the American Maps.—  
 Clover Creek.—Creek omitted.—Slate Bank.—Immense quan-  
 tity of Game.—Yellow Bank.—Little Pigeon's Creek.—Island  
 inaccurately marked.*

LOUISVILLE contains about sixty or eighty houses, built for the most part of wood; it is situated on a platform on the left, in the hollow part of the bend of the river, and opposite the fall. Those who laid the foundation of this town consulted rather the beauty

of its situation, which is extremely picturesque, from the prolongation of the course of the Ohio on the one side, and the view of the rapids on the other, than the convenience of travellers; for this town being placed very far below the point where the current begins, and on the opposite side of the channel, all the vessels which touch there to take pilots are obliged to ascend the river more than two miles above Louisville, to gain the current on the opposite side, which leads to a considerable expense and much loss of time. This disadvantage in the situation of Louisville is no doubt the reason which has prevented it from increasing, and which induced Mr. Lachassague, a Frenchman by birth, who perceived this inconvenience, to lay the foundations of another town on the right side of the river, immediately at the head of the fall. All the boats which are to pass the current, commonly touch at Cassania, which is the name of the new town, consisting only of two or three houses, and a store.

A mile below Cassania, and on the right, is Fort Stuben, of the same form and construction as those which we have already described; it is garrisoned by sixty men of the continental troops.

Below the current, and on the same side, is another little town, called Clarksville, still worse situated in every respect than Louisville. The spot on which it is

built is liable to inundations, and as there are many shoals on this side, the boats which intend stopping after passing the fall, are obliged to go on the side opposite to Lower Landing, not being able to approach this place. This town, therefore, is on the decline, and contains at present only five or six huts.

The fall is occasioned by a great bank of calcareous stone. Two miles above, the river widens much, runs gently, and its bed becomes deeper. Its breadth is three quarters of a mile, and its depth from twelve to fifteen feet. Near the fall the islands and rocks by which it is formed take up nearly three quarters of the bed of the river, and fill up and obstruct all the side on the south-east; the waters have no other passage in dry seasons than on the side of the north-west; but as they are much confined, and the plane over which they roll is very shelving, and they have to make their way across every obstacle, they rush along with the greatest impetuosity and violence.

On the side which is obstructed there are only five or six inches of water, and often the bank of stones is dry.\* In the channel where the boats pass, the depth of water varies, but is never less than from four to five feet: this

\* The greater part of these banks of stones is covered with petrifications.

depth would become more than sufficient to pass at all times with security, if the windings of the channel were not so abrupt and numerous, and the current so strong; but in the present state of the passage, the pilot has scarcely time to steer, or the boat to change its direction. We had ourselves a disagreeable experience of this, since, notwithstanding the skill and attention of our pilot, we touched on one of these points against a rock, which took off three feet of our keel.

In the season of floods these inconveniences disappear, and during eight months in the year there is water enough to pass the double channel with all kinds of boats.

We cannot leave Louisville without relating a circumstance which does honor to the American character, and which would not disgrace the annals of the finest days of Rome.

A person of great military talents, and who had acquired considerable reputation in the war which procured independence to America; who had also gained from the natives almost the whole of that immense country which forms now the Western States; the rival, in short, of General Washington; had retired to Louisville after the peace, either from caprice or discontent against the government at that time, in the hope of ending his days tranquilly in the midst of his family, and on the spot

which had been the scene of his achievements. But unhappily, idleness and listlessness, inseparable companions, followed him in his retreat. He who is conversant only with military affairs, who knows nothing of agriculture or commerce, and has no taste for the charms of nature, is soon wearied of still life. Drinking and intoxication became the sole resource of this officer, and he carried this degrading passion to such an excess, that he was often found lying in a state of stupified drunkenness in the streets. We were the witnesses of a scene the most humiliating for a man who once inspired sentiments of high veneration,\* but now excited only those of pity. We returned about seven in the evening from taking a walk in the environs of Louisville, when we perceived, in the midst of the square, a number of persons who were crowding around something that lay extended on the ground, on which a blanket had been thrown, and which a man was about to take up and carry off. Drawing near to satisfy our curiosity, I asked the man, who ap-

\* This veneration was so great among the Indians against whom he had made war, that when the peace was concluded, several tribes sent deputations of their young warriors, the object of whose visit was to touch him, and chiefly to cut off some shred of his cloaths. "With this manitou (talisman)," said they, in returning to their families, "we are sure of being always brave" and great warriors."

peared to me to be a shoemaker, what was the matter. He turned towards me with a look expressive of sorrow, and said, "Do you not see, Sir, it is that hero, that great man; he has forgotten at this moment the important services which he has rendered us; but it is our duty to remember them: I cover him thus, to preserve him from the contempt of the people." He had, indeed, as soon as he saw him fall, run out of his shop with a woollen blanket, which he threw over him, and carried him into his house, where we were witnesses of the affectionate care with which he treated him.

Inactivity for a military man, or for a man who has no knowledge but that of war, is one of the greatest evils he can experience; not only because he is condemned to idleness, but because in the profession of arms, reputation diminishes the moment it ceases to augment.

The life of a public functionary, to end with glory and dignity, ought to be employed in doing always something better than what he has done before. I know that it may be objected, that adversity destroys energy, and crushes those on whom it weighs. This may be true, but it is true only with ordinary minds: he who possesses fortitude is shielded against misfortune; it is in adversity alone that true dignity of mind is displayed, and it is in that season only that a great man assumes the rank for which he was destined by nature.

During the time we remained at Louisville, the thermometer was constantly at twenty-six, twenty-seven, and twenty-eight degrees, of Reaumur. We observed that during the night it descended from five to six degrees. The winds, of which we took note daily since our departure from Pittsburgh, were always in nearly the same quarter of the circle, from west to south. We have since been assured, that in this season, unless there be storms, the winds never turn to the east; consequently, the navigator may be sure, that from May to October they are always in the same direction.

After passing the fall, we found Sand Island, and a small creek, called Silver Creek, on the right, and opposite the island. The bed of the river below the fall is very narrow: the depth of water is from eight to fourteen feet, the stream very slow, and both sides flat and sandy.

Three miles from Louisville the banks on the right are high and perpendicular like cliffs, but those on the left continue to be flat, and are swampy to a very great distance. We perceived nothing all around us but rocks, and low and sandy ground.

We descended twenty-eight miles without finding a single habitation, leaving on our right several rivulets or ravines, and reached Salt River. In this space almost the

whole of the country on the left side is without springs. The navigation is good; the depth of water is every where from ten to fifteen feet.

The current of Salt River is extremely slow during the space of seventeen miles from its mouth, with from twenty-five to thirty feet of water; but farther up the navigation is stopped by a fall, beyond which it is again navigable twenty miles for canoes. It runs through a very fine country, and high enough two miles from its mouth to be out of the reach of inundations: there are already several settlements three miles from the mouth of this river.

Six miles beyond Salt River is Otter's Creek, which is not navigable. The aspect of the country continues the same, low and swampy. The depth of water from Salt Creek is six, seven, eight, ten, and fifteen feet.

Five miles from Otter's Creek, and on the left side, is Whio-Pio-Mingo's Station, which is as yet composed of only two small huts: these are the only habitations we perceived since we left Louisville. Both sides are here bordered with hills of gentle declivity and of varied beautiful forms; but the soil which covers them is of little value.

Two miles and three quarters lower on the same side, we found Doe's Run Rivulet. The navigation from Otter's Creek continues good: the soundings were from eight to twelve feet.

From Doe's Run to Falling Spring, on the left, is four miles. Falling Spring consists of waters which filter through beds of calcareous stone, on a breadth of twenty-four yards. The volume of water is considerable, and it gushes out with force; these waters are the best, the most limpid, and the freshest we met with in our voyage on the Ohio. The lands opposite Falling Spring are low and liable to inundations. The left side is lined with rocks from twenty to thirty feet high; between which chain the lands are also low and swampy.

We continued our course seven miles further, leaving several ravines on both sides, and reached French Creek, which is dry during the summer, and is never navigable. After passing this creek, we found on the left a chain of lofty heights, composed of great masses of rock. The lands on the opposite side are low and swampy; the soil is sand mixed with gravel.

Six miles lower down is a small creek, called Buck Creek, not navigable. Here a chain of rocks rises on the right, and the Ohio runs between two great cliffs that are often perpendicular. The soundings from Falling Spring never varied between ten and twelve feet.

Four miles lower we reached a small island, very ill described on the map. This is only an alluvion on which were a few willows, and which is covered in high waters.

This island is separated from the right bank by a channel which is fordable during the summer; the channel on the left is from ten to twelve feet deep.

Two miles lower we came to a second island, somewhat distant from the left bank than the other is from the right. It is high out of the water, and covered with very fine wood. We took the channel on the right; that on the left being full of shoals, with only one or two feet of water. The right is every where from nine to ten feet deep, and without any impediments.

As soon as we had passed the point of the island, we were obliged to turn short to the left, to avoid the narrows which are on the right, and which are easily seen by the breakers; and in which there is only two feet water, and sometimes not more than one.

Ignorant of this danger we took the channel on the left, and struck on a sand-bank, from which we should have had great difficulty to have extricated ourselves, but for a violent squall, which filled our sail at the moment, and relieved us from our dangerous position.

In such a circumstance, with a boat as large as ours, the half of our crew sick, and in the midst of a desert, we ought to have waited for the autumnal floods. Without such precautions those who undertake a summer expedition of this kind may perish from want of food, or be

killed by the Indians, examples of which are not unusual.

Opposite to the island and the narrows on the right, is a creek, called Windot's Creek. It is that which forms the narrows which we have just mentioned by the quantity of great stones which it rolls down. This creek takes its source in the heights, is navigable for ten miles, and may become very useful at some future period for the establishment of various kinds of manufactories.

Below this creek the Ohio makes a great bend towards the south-west, taking its course continually between two rocky mountains, high and steep.

Eleven miles below Windot's Creek is Preston's Creek, which is not navigable.

Two miles and an half lower we left on the right a small creek, called Blue Creek, which is fit only to turn mills, and which overflows the low lands.

Both sides of the Ohio begin here to be less hemmed in; the left side is altogether disengaged from every kind of height for two or three miles inland. The depth of water varies from eight to ten, fifteen, and twenty-five feet.

A little lower, and almost opposite the creek, is a sand-bank which stretches far into the river, and which we avoided by steering to the right: the soundings are from

twelve to fifteen feet. On the left are very fine grounds covered with lofty oak and beech; but in the season of floods this ground is under water to the depth of four or five feet.

The right side, on the contrary, is lined with heights, covered with great masses of perpendicular rocks, which assume at times very extraordinary forms, from the united action of the weather, the waters, and the sun. No springs or rivulets water these banks; those described in the charts are only ravines that carry off the rains.

In the different excursions which we made on both sides the river, we found, among other productions, the vine in great abundance, but not of that kind which is common in America, twining around the trees as high as the top. These vines, on the contrary, are low, creeping, and resemble in the leaf those of Madeira. The stalk is not more than from two feet and a half to three feet; it grows in a gravelly and stony soil and always in groups. As it was only the month of July, we could not judge of the quality of its grapes; but we were assured that they were generally black, and of a very fine flavor, which leaves no doubt that if it were cultivated it would become equal to that of Europe. The large raspberry grows also in this place in great abundance.

Although the navigation be in general good at all seasons from Louisville, those who undertake the voyage

without a pilot cannot be too strongly recommended to avoid carefully, when the waters are low, all the points; that is, wherever the river makes a bend, to steer on the opposite side, the angle being in general composed of alluvions or sand-banks.

Seven miles below Blue Creek, on the left side, is Helm's Creek, which is nothing but a deep ravine, and in which during the summer there is not six inches of water. The country through which it flows is low, marshy, and for most part covered with sand and gravel. The depth of water from Blue Creek is from twenty to twenty-five feet.

We proceeded two miles to an island omitted on every chart, but which one of our Canadians called Dardada Island (the Indian name). This island deserves the more to be known, as it is situated exactly in the middle of the river, and is surrounded with a great quantity of sand-banks, which are not always visible. When we were at the distance of half a mile from this island, the depth of water, which was twenty-five feet, suddenly decreased to eight or nine. We steered, therefore, to the right, leaving the island on our left, and followed the channel, which yielded from ten to fourteen feet of water. Had we approached nearer the island we should have found not more than one or two feet. This transition being very abrupt,

we used the precaution of entering the passage with the lead in our hand.

At the extremity of the island we found three sand-banks, which were dry; two on the right, and one at the end of the island: this last sand-bank we passed on our left; the two others on the right. The channel is eight and nine feet deep.

Opposite to the two sand-banks is a small creek, called by the Canadians Mirebelais; it is totally omitted on the chart.

The river makes a bend towards the south; we proceeded eight miles, and found on the left a creek, called Little Yellow Creek.

At day-break we were surprised by a very thick fog, which continued until ten o'clock; the night was so cold, that we were obliged to use our blankets. The weather was perfectly calm.

Four miles lower, after passing on our left three small ravines, we reached on the same side Arden's Creek. This creek is very narrow at its mouth, but there is water the whole year; we ascended five miles in the canoe, when our further progress was interrupted by a slight fall. During the late war with the Indians, the Americans built a small fort at its source, to prevent their incursions into Kentucky, which they usually made by this creek.

Between Yellow Creek and Arden's Creek, there are a great number of sand-banks on the Ohio, which are covered with water. It is always necessary, therefore, to keep in the middle, where there are generally six, seven, and ten feet water. When the soundings pass suddenly from six to three feet, the track of the channel is missed; all the various depths of water in this passage have been scrupulously noted in the new chart.

Below Arden's Creek the bed of the river grows wider, but the aspect of the country continues the same; the lands are low and marshy, sometimes sandy and strewn with great masses of rock, known by the name of millstones.

Two miles and an half below Arden's Creek there is an island described in all the American maps; we looked for it in vain, and are convinced that no such island exists.

Nine miles further down, we passed three small creeks on the left, which have no name; we called that in the middle Bear's Creek, having on this spot killed a bear. The soundings during this passage gave from ten to twelve feet; the navigation is excellent.

Five miles and an half below Bear's Creek, and on the same side, another very considerable creek empties itself, called Clover's Creek. It is very much hemmed in, and

may be about twenty yards wide at its mouth: it would be navigable for many miles at all seasons, but for the immense quantity of trees with which its bed is choked up. The lands through which it flows are extremely fine, but as this part is liable to inundations, the country is a desert.

Six miles from Clover Creek, on the right side, is a very fine creek, entirely forgotten on the charts, and which has water the whole year. The lands through which it flows are of the first quality; we called it Jefferson's Creek.

A few miles below this creek, the river, which had been so long hemmed in, and, as it were, compressed by the rocks, opens suddenly and flows broad with a majestic course. The heights which rose on both sides, are replaced by lands of the first quality, but swampy and devoid of springs.

On the left side is a continued level covered with wood, and intersected by small lakes, the stagnant waters of which will render this part of the country for a long while very unhealthy, and prevent the settlement of emigrants.

We proceeded thirteen miles below Jefferson's Creek, leaving several ravines dry on both sides, with a small pond, and reached Anderson's Creek, situated on the right; it

is pretty large, and navigable at all times to some distance for canoes. The country is still a desert. The soundings for the last fourteen miles were successively ten, fifteen, twenty-five, twelve, and eight feet: the navigation good.

Two miles below Anderson's Creek, on the right side, is a bank of slate of a very fine kind, and which sketches along the river for nearly two miles. The left side continues flat and swampy. We proceeded, reckoning from the slate-bank, eight miles further, sailing between two sand-banks, which are always covered with water, and which we avoided by keeping in the middle of the river till we reached Blackford's Creek. The depth in the channel is six, eight, ten, twelve, and fifteen feet: care must be taken to keep at a distance from the sides, when the soundings are less than six feet.

Two miles below Blackford's Creek a large sand-bank, projecting from the left side, extends itself for nearly three miles: we directed our course to the right, where the soundings gave eight, ten, and twelve feet. The country continued desert and marshy.

In the evening the weather was stormy; the moon appeared pale, with rays diverging like the tail of a peacock. The Canadians predicted a tempest; and about midnight we were awakened by so violent a storm, that it was with difficulty we could fasten our boat so as to

prevent it from striking on the banks. The wind came from the S. S. E. and blew with great impetuosity. It was impossible for us the next day to continue our route; the waves forced back the current with such violence, that it drove our boat up the stream in spite of our oars. Both sides of the river were covered with game, chiefly water fowl, and in such quantities that it seemed scarcely possible to augment the number: geese, ducks, swans, herons, and roebucks, were mingled together, and lined both sides of the Ohio. We took advantage of the delay in our journey, and employed ourselves in hunting. At five in the evening, when the weather became more calm, we proceeded, after having killed more game than our crew could consume in eight days.

We passed several small rivulets on both sides, and at six miles from the end of the sand-bank, reached two islands, the first of which is omitted in every chart, and the second improperly placed: this last is uninhabited. We left them on our right. The channel is from eight to ten, eighteen, and nineteen feet deep.

Opposite to the extremity of the second island, and on the left side, at six miles distance from the head of the first, is Yellow Bank, which is a small settlement, consisting of eight or ten families.

Having doubled the last island, we steered to the right, in order to avoid the shallows which run along the left side. In keeping the middle of the channel we found fifteen and sixteen feet of water.

Three miles farther we reached an island, and three miles lower two others; these last are opposite each other, and intercept almost the whole of the river for the space of a mile and an half. We passed the three islands on the left, steering to the right, and taking care not to approach them, as they are surrounded with sand-banks and shoals. This passage requires the whole attention of the pilot, and in no case should the channel on the left be taken. The soundings gave four, five, seven, and eight feet of water; when it is less than four feet, the direction must be changed to avoid striking. The country is still uninhabited and marshy.

We continued our progress seven miles, with a good navigation, and reached Little Pigeon's Creek, situated on the right side, but which is navigable at no time of the year. It is at this point that a road has just been opened to the post of St. Vincent's, on the Wabash.

Four miles lower is an island which is two miles and an half long. On every chart it is placed too much to the south-west. We left it on the right, and steered to the left between that and a sand-bank, which projects from

the left side into the middle of the river, and which is always covered. The channel in the middle is from ten to eighteen feet, but near the bank it is only three feet. The channel on the right is impracticable when the waters are low.

Three miles and an half below this island, the Green River throws itself into the Ohio.

## CHAPTER XII.

*Green River.—Islands omitted.—Pigeon's Creek.—Red Bank.—Characteristic Trait.—Diamond's Island.—Great Island.—High Land Creek.—Extraordinary Swell.—Particular description of the River Wabash.—Post St. Vincent's.—High Country.—Vermillion River.—Ouiah Rapid.—Eel River.—Great Rapid.—River of the Great Calumet.—Rapid of St. Cyr.—River Mussissinoec.—L'Hôpital.—Remarkable rock.—River Salaminique.—The little River.—Portage of Miamis.—Wolf Rapid.—General Observations.*

GREEN River, one of the great branches of the Ohio, is four hundred yards wide at its mouth, and is navigable one hundred and fifty miles for barges drawing three feet of water. This river traverses a considerable part of Kentucky; but as the lands are very low and often overflowed, there are no habitations on its banks below a

little town, called Vienna, fifty miles above its junction with the Ohio.

It is, however, to be remarked, that the country on the left of this river is somewhat more elevated than that on the right, and even hilly. It is generally thought that this spot will suit well the cultivation of the vine, which is here of a quality, in its wild state, very different from that in other parts of the continent, as we have already explained. The country in this part is a desert.

Immediately after passing Green River we found two islands opposite to each other, one of which was nearly three miles long. One of these islands only is noted in the charts; the other has been entirely forgotten. The channel on the right, between the largest of these islands and the land, is dry during the summer; that in the middle is choked up with drift-wood and sand-banks. We took the channel on the left, and kept as close as possible to the bank, where we found fourteen, fifteen, and eighteen feet of water.

The appearance of the country after passing Green River is the same; low swampy lands, mixed with sand and gravel.

Ten miles below Green River we left on our right a creek, called Pigeon's Creek, which is navigable in high waters for canoes, but only for a few miles.

After passing Pigeon's Creek, the Ohio turns towards the south. We kept near the right bank, in order to avoid a large sand-bank, which extends itself from the left. Having doubled the point and the sand-bank, we found a small island of sand, which we left on our right; and six miles lower, reckoning from Pigeon's Creek, we reached another small island, which is separated from the right side by only a very narrow channel. We left it on the right, taking care immediately after passing it to steer to the right, in order to avoid a very large sand-bank which extends from the left. We continued descending six miles, leaving on the right another sand-bank, which was dry, and which is situated in the midst of the river, and reached Red Bank.

Carefully following the channel from Pigeon's Creek to this point, we found the water never less than from twelve to eighteen feet.

Red Bank is a small establishment recently formed, consisting of thirty or thirty-five families, and is the only spot on the banks of the Ohio, from Louisville, secure from inundation in high waters. It may, therefore, be considered as a valuable position in a military point of view. A fort placed at Red Bank would be extremely useful to stop whatever ascends the Ohio, since the channel

passes at the foot of the left bank, which is a cliff, and by its elevation commands both this and the opposite side.

The inhabitants of Red Bank are only hunters, or what are called foresters. They cultivate no ground, but subsist on the produce of their hunting and fishing, and are almost naked. The following trait may serve to give an idea of their character. At our arrival we found a number of these hunters who had assembled to regale themselves on the banks of the river with the spoils of their chase on the preceding day, when they had killed a very fine buffaloe. They had drunk plentifully of whisky, and though the greater number were intoxicated, they were amusing themselves in firing with carabines against a piece of plank tied to a tree, which is called shooting at a mark. The board, probably ill fastened, fell at each shot; one of the party at length losing patience, took it up, and placing it between his legs, called out to his companions: "Now, fire away!" which they did immediately, and always with the same address; whilst he who held the board exclaimed at each shot: "It is in!" This amusement, which lasted two hours without any accident taking place, may appear incredible to those who are not acquainted with the singular skill of these men; but it is sufficient to observe that they will aim at

the head of a squirrel or a turkey, and very rarely miss. The seeming intrepidity of the man who held the board becomes, therefore, only an ordinary circumstance.

Two miles and an half below Red Bank, we passed an island on our left. The channel on the right is alone practicable; the other side being encumbered with drift-wood and sand. The soundings on the right are from fifteen to eighteen feet.

Two miles below the head of the island we steered to the left, to avoid a sand-bank on the right, and which extends half way across the river. Two miles further the river makes a bend towards the west. Before we reached the point of this turning we steered to the right, to avoid a sand-bank which juts out from the land; and after descending five miles further than the salient point of this bank, that is, fourteen miles from Red Bank, we reached a large island, called Diamond's Island. This island is one of the most considerable, and the most elevated we had seen on the Ohio; it is four miles long, and is situated in the middle of the river, surrounded with a large quantity of sand-banks. The two passages which it forms are equally good: we took that on the left; nevertheless, in ascending the river that on the right is to be preferred, because the stream is much less rapid. The passage on that side is from nine to ten feet deep.

Opposite the middle of the island, on the left, is a small but increasing establishment, consisting of five or six huts.

After passing the point of the island, we found two large sand-banks placed in the same direction, that is, in the middle of the river. We left them on the right, and at the extremity of these two banks, which are three miles long, we found a small island situated near the left side, in a bay: we steered to the right, between the end of the last sand-bank and the island.

Here the river makes a bend towards the south-east. After doubling the point, we found on the left a very considerable island at seven miles distance from Diamond Island. The channel during this passage is nine and ten feet deep: this navigation requires constant attention.

We passed this last island on our left; the channel on the right being the only one navigable.

Ten miles below the head of this last island we reached a creek, called Highland Creek, at the mouth of which is a small settlement, composed of three families. The navigation continues good during these last ten miles, if care be taken to keep the middle of the river, in order to avoid the different sand-banks situated on both sides: the soundings are ten, twelve, and eighteen feet.

The river in this place was agitated by a great swell, which appeared to us very extraordinary, and perfectly

resembling those which take place in the colonies before spring tides; as the swell came from below, we imagined that it was the effect of some violent gust in the Mississippi, and towards the mouth of the Ohio. It was so strong, that our canoe, which was astern, sunk. The wind blew from the south with an excessive rain.

We proceeded seven miles and an half, and reached the mouth of Wabash River, opposite which is situated a great island, called Wabash Island, two miles and an half long, and which is high and well wooded.

Both passages are equally good; we chose that on the right, in order to inspect the mouths of this river. The depth of water in the right channel is from ten to fifteen feet.

The mouth of the Wabash is situated thirty-seven degrees forty-one minutes north. It is about seven hundred yards wide, and continues the same breadth as far as Post St. Vincent's: the distance from the mouth of the Wabash\* to Post St. Vincent's is computed at sixty leagues, though in a straight line it is not forty. In the whole of this space there are only two rapids, one twelve leagues from St. Vincent's, and half a mile above White River,

\* The following description was given to me by a barge-master, who made this voyage twice every year.

and the other fifteen leagues from the mouth of this last river, called the Great Chain, where may be seen, when the waters are very low, a long line of rocks, which at a certain distance resembles a mill-dyke. This chain of rocks has forced the waters to form a channel on the left side, where boats may pass at all times, excepting the winter and during the ice.

From Post St. Vincent's to the High Land is forty leagues, and the navigation excellent. From the High Land to Vermillion River is reckoned twenty leagues, and the navigation continues good. From thence to Ouiah is twenty leagues, and the navigation improves.

From Ouiah to the river Típiconow are six leagues\* of excellent navigation, and from thence to Pisse Vache two leagues. At this place is a rapid, about ten fathoms in length, and which sometimes has not ten inches of water. This is the first point where the navigation becomes difficult.

Four leagues higher is another rapid from fifteen to twenty fathoms in length, with eight inches of water: the channel is always on the left side in ascending. Six leagues beyond this last rapid is Little Rock River. There is a

\* In the course of this description, and in conformity to the terms of distance used in the country, we substitute the word league for that of mile.

rapid at this spot, extremely violent, but with sufficient water. About this place the river is sometimes shallow and sometimes deep, according to the depôt of sand which the waters have left or washed away.

From thence to Eel River are two leagues of good navigation, and a league higher is the Great Rapid; its length is twenty fathom, with six, seven, and eight inches of water at most; and above is a shallow, half a league long, with six inches of water.

Four leagues beyond the Great Rapid is the river of the Great Calumet. Here is another rapid, ten fathoms in length, with a sufficient depth of water.

From the river of the Great Calumet to a small island, without a name, is one league; this island must be left on the right in ascending, and above is a shallow with six inches of water.

From this small island to the rapid St. Cyr is three leagues; this rapid is half a league in length, and with sufficient water.

From this rapid to the river Mussissinoe is two leagues. Here is another rapid, twelve fathoms long, with twelve inches of water.

From hence to l'Hôpital is seven leagues, during which there is very little water; the barks are obliged to unload

during the space of a league. At this spot is a rock of an enormous size, situated on the northern side.

From l'Hôpital to the river Salaminique is three leagues. Here is a small island; the passage is on the southern side, and there is a rapid of three fathoms length, with sufficient water.

From thence to Bended Maple one league. From Bended Maple to the Little River four leagues.

Leaving here the Wabash, we followed the course of the Little River. From its mouth to the village of the Miamis, situated at its source, is twelve leagues: in this place is a portage of three leagues and an half to reach the sources of the river of the Miamis. From thence to Wolf Rapid is fifty-one leagues, during which there are a great number of small rapids, but with sufficient water to leave the navigation free. At Wolf Rapid the boats unload only in dry seasons.

From Wolf Rapid to Roche-de-bout is three leagues: here is another rapid three leagues long, but every where sufficient depth of water.

From Roche-de-bout to Lake Erie is six leagues. From thence to the river Detroit twelve leagues, and to Detroit Fort six leagues.

In the season of the high waters, as in the months of March, April, and May, there is sufficient water at the

portage of the Miamis. It is in this place that the waters divide, and run on one side into Lake Erie, and on the other into the Wabash. It is to be noted that all the depths of the rapids and shallows have been calculated when the waters were at the lowest during the year, none of the rapids being seen or felt when the waters are high.

From the mouth of the Wabash great barges are used, which carry from twenty to thirty thousand weight, as far as St. Vincent's; but from this post barks are employed in carrying four, five, and six thousand weight.

St. Vincent's is a small mean village, containing one hundred families, the greater part French, ruined by General Clark during the last war, as were also the Illinois. A bad wooden fort, in the usual mode of construction, is built here.

The course of the Wabash is in general slow; it traverses a fine country sufficiently elevated, and less liable to inundations than any other parts of this continent. Vast natural meadows form a part of this country. The Wabash rolls over a bed of sand and gravel, in which precious stones are often found: the emerald and topaz have been observed to be of the number. The banks are clothed with fine woods of the same kind as those of the Beautiful River or the Ohio, and the black and white

mulberry grow in the greatest profusion on this spot. Salt springs and coal-mines have also been discovered.

The inhabitants of Post St. Vincent's cultivate in general wheat, maize, and tobacco equal to that of Virginia; but hunting and trading with the Indians are their principal occupations. The exportation of fine furs and skins of roebucks amounts annually, on an average, to one hundred and twenty thousand livres.

Hemp grows naturally, and the vine is also in great abundance, and of a very peculiar kind; the grape is black, small, and the skin extremely delicate. The inhabitants make a kind of wine which is agreeable to the taste, but cannot long be preserved.

One hundred and ten miles above Post St. Vincent's is a small French establishment, called Ouia, or Ouiatanon, containing ten or twelve families, of which the occupations are also hunting, trading, and a little farming; but as this settlement lies further back than that of Post St. Vincent's, trading is the most lucrative employment of the inhabitants. The exportation from Ouiatanon in furs and roebuck skins was estimated upon an average at one hundred and ninety-two thousand francs a year; but this branch of commerce diminishes sensibly; because as the adjacent country becomes populous, the game retreats further back into the country.

At the passage of the Miamis carriages are regularly found to convey the baggage and goods of travellers.

The head of the Wabash, at the place where the waters divide, forms, militarily speaking, a fine position. This point is the key of the whole country watered by the Wabash, and the first which ought to be fortified if the North Western States ever make a schism.



## CHAPTER XIII.

*Continuation of the Ohio.—Saline Creek.—Trade Creek.—Big Cave.—Bear hunting.—Great Island.—Mistake in the charts.—Omissions.—Other mistakes in the maps.—The Three Great Islands.—Cumberland River.—Tennessee River.—Observation.—Fort Massac.—Military Observation.—Arrest.—Massac Creek.—Cash Island.—Cash Creek.—Mouths of the Ohio.*

THE aspect of the country from Red Bank to this point is nearly the same. Both sides of the Ohio are in general low and swampy, a few trifling elevations near Highland Creek excepted.

One mile below the end of Wabash Island we found three small islands on the right; the two first almost joined to each other, the third more distinct. These islands are as yet covered only with young willows, the

tops of which are visible in high waters. We kept on the right to avoid the shallows. These three islands extend four miles, reckoning from Wabash Island.

Four miles below the last of these small islands, we left a fourth on the left, nearly of the same kind as the preceding; that is, very low and covered with young willows.

The depth of water from Wabash is from fifteen to eighteen and twenty feet. The lands continue low and swampy; the country is a desert.

Nine miles below this last island, Saline Creek empties itself into the Ohio. At a mile above this creek, we left on our right a great sand-bank, half dry; taking care to steer very near the left, as this bank occupies a considerable portion of the bed of the river. The soundings are from six to eight feet.

This creek might very properly be called Highland, for at this point ends that long and almost uninterrupted extent of low lands which begins at Louisville.

After passing Saline Creek, chains of heights rise on both sides the river; that on the right is very elevated, covered with great rocks, and often steep.

Eight miles and an half farther we reached Trade Creek; leaving on our right a small dry sand-bank, which joins the land.

We proceeded six miles and an half, passing on our left two great defiles and a small island, and reached Big Cave, situated on the right.

From Saline Creek to Big Cave the navigation is easy: the soundings were from five to ten and twelve feet. This cavern, twenty-two or twenty-three feet deep, and forty feet in height, is filled in high waters: it is an excavation made in the rocks by the continual beatings of the flood. We found a few crystallisations, but no saltpetre, nor any petrifications whatever.

The lands on the left side, opposite Big Cave, are low and swampy: the right side continues bordered with rocky heights. On this spot we killed a bear, which was crossing the Ohio. This mode of hunting is pleasant for those who search for amusement rather than profit, since at this season the prize is of no value. The bear, like most other animals, is fond of bathing during the great heats, as well to cool himself as to get rid of the vermin which infest him. They are often seen, even in broad day, swimming across the largest rivers, and it is while they are on their passage that the hunters attack them. We had observed the bear we killed, bathing with several others on the right side, when he suddenly determined to cross the river, the breadth of which in this place is not less than twenty-four hundred yards. As soon as we

observed that he had made a third of the way, four of us threw ourselves into the little canoe, a hunter, myself, and two Canadians whom I selected as the most expert in guiding the boat, and also in preventing the bear during the attack from overturning it, which is often the case. We rowed towards him, and endeavoured to cut him off from the side of the land whence he had set out. When he saw himself so pressed that he could not go back, instead of crossing the river he followed the stream, and swam with such extraordinary swiftness, that it was half an hour, with all the exertion of our oars, before we came within musket shot. Perceiving that we had gained on him to this point, he turned briskly round, and while he was making this movement, which obliged him to expose his whole side, the hunter and myself fired our carabines: the hunter's bullet passed through his neck, and mine through the withers; but as neither of these wounds were mortal, they served only to irritate him, and he rushed forwards, with redoubled fury, to overturn our canoe, which we avoided by the great dexterity of the boatmen, who kept continually above the current. This combat lasted nearly half an hour, in which space we fired six times without being able to kill him. At every discharge the bear turned upon us, and in spite of the skill of our Canadians, he succeeded at length in passing under

our canoe; but as he had already lost much blood, and was consequently exhausted, he had not strength to overturn it. As soon as he raised his head, the pilot struck him with an axe, which stunned and drowned him.

One of the most extraordinary incidents in this struggle was the courage of a pretty little terrier, which at the beginning of the attack threw himself into the water, and fixed himself on the back of the animal; till the bear, enraged at his worrying and barking, plunged down, and raising himself instantly again, tore him open.

The roebuck, also, during the summer traverses the widest rivers. We often attempted to chase him in the same manner, but his speed is such that no rower whatever can overtake him. We made the trial repeatedly both in going up and down, but always ineffectually; which induces us to think, that of all quadrupeds this is the swiftest.

Leaving Big Cave, and proceeding two miles, we found a large island with two sand-banks, which were dry. Opposite the middle of the island we saw a third jutting out from the right, then a fourth on the same side, and opposite the end of the island. This passage is very difficult. We left the island and the two first sand-banks on our left, and the two others on our right.

It is chiefly between the second and third of these banks that the greatest skill of the mariner is requisite: the channel, in this place, makes several windings, and is not more than three or four feet in its greatest depth.

After passing the island, the heights close upon the banks on the right side; they are no longer rocky, but consist of rich lands covered with very fine wood.

Five miles from the last island, not comprising its length, which is three miles and an half, we found on the left a large creek, delineated too much to the west in the American charts. It is navigable ten miles at all seasons for canoes.

Opposite to this creek is a great sand-bank on the right side, and which is half dry; we avoided it by steering to the left. Care must be taken also not to approach too near to this side, to avoid an eddy which is found immediately after the creek, and which occupies a space of four hundred yards.

A mile and an half lower, on the same side, is a second creek, not described in any chart.

A mile and an half below this last creek we perceived an island, which is separated from the main land only by a small channel. We left this island on our right, and three miles lower, including the length of the island, we reached another, marked five miles too much to the

westward on all the American charts: we took the channel on the right, that on the left being full of sand-banks, and choked by driftwood. In the channel we had taken we found ten, fifteen, and eighteen feet of water: the navigation from the great island to this place is good.

The aspect of the country continues the same; both sides are lined with heights.

At a short distance from this island, we left a defile on the right; and three miles lower, reckoning from the head of this island, we found three others, which follow each other at nearly equal distances. The two first are connected by a great sand-bank, and take up a space of nearly four miles. We passed these three islands on our left, as well as a great sand-bank, which is at the end of the third, and which is a mile in length under water. Opposite to this sand-bank and to the last of these islands, we perceived on the right two creeks, neither of which are navigable. The channel on the left is altogether impracticable; that on the right has from fifteen to twenty feet of water.

Two miles below the sand-bank we found an island, situated in the midst of the river, very high, which we passed on our left; and three miles lower than the head of this island, we found a second of the same elevation; we left it on our right, the channel on the left being the only

practicable. Three miles further down than this last island we found a third, situated exactly opposite Cumberland River; we passed it on the left, the channel between the island and the mouth of Cumberland River being often filled with driftwood, brought down by that river, which renders the passage on that side sometimes difficult.

From the three small islands abovementioned to Cumberland River, which is nearly fifteen miles, the navigation with little attention is every where good. The soundings gave fifteen, eighteen, twenty, and twenty-five feet of water.

After passing the last of these three small islands, the country changes its aspect; the heights on the right side disappear altogether, and we perceived nothing but a vast extent of low and swampy ground.

Cumberland River is from six hundred to seven hundred yards wide at its mouth: it is navigable for boats of all sizes one hundred and eighty miles, and its banks are already inhabited. The mouth of this river is surrounded by small eminences very advantageously situated for protecting the entrance.

Ten miles below Cumberland River, we reached Tennessee River, the entrance of which is marked by two islands, situated so close to each other, that without great

attention we should have passed without perceiving that they were separated.

On the left side, between Cumberland and Tennessee Rivers, we observed a small wooden fort, the object of which was the protection of the navigation of those two rivers, and also of the Ohio, during the war with the Indians; but the fort is placed at too great a distance to answer this triple view, and is really useful only for the Ohio. From Cumberland River to Tennessee the navigation is excellent; the height of the water is from twelve to sixteen and eighteen feet. The lands are low and swampy on both sides. Tennessee River is nearly of the same breadth as Cumberland River, and is navigable for all kinds of boats as high as Muscle Shoals.

After passing Tennessee River, the bed of the Ohio widens considerably, and at the end of eleven miles, leaving several defiles on both sides, with the navigation uninterrupted, we reached Fort Massac. The depth of water in this distance is sixteen, eighteen, and twenty feet. The lands on both sides are low and swampy.

Fort Massac, so called by the Americans, and Fort Massacre by the Canadians,\* is a post anciently established

\* The Canadians informed us, that the Indians having one day surprised and massacred all the French who were within the fort, it was on that account called Fort Massac.

by the French, and abandoned at the time of the cession of Louisiana; it has lately been repaired, and has been occupied two years past by the Americans.

This fort is erected on a small promontory; it is built with wood, and has four bastions surrounded with palisades, of the same form and construction as all those mentioned in the course of this work. The garrison is composed of an hundred men, commanded by a captain; the batteries are mounted with eight pieces of twelve. The fault of this position, with respect to the navigation of the Ohio, is, that the channel being on the opposite side, the passage may be effected, especially during the night, without any fear of the batteries.

It is, nevertheless, very important to keep this point, because it communicates by two different roads with the country of the Illinois. One of these, called the lower road, and which is the shortest, is practicable only in very dry seasons, and when the waters are very low; because there are several creeks to pass, which are not fordable in high waters; in this case, the other, called the upper road, must be taken, which is much longer, and which leads along the heights, crossing the creeks or rivers at their sources. This road is passable for carriages, whilst the lower road is practicable only for horse or foot passengers. The distance from hence to Kaskasias by the

lower road is reckoned eighty miles, that by the upper road one hundred and fifty.

The platform, on which the fort is erected, is about seventy feet above the level of low water, and has consequently nothing to fear from inundations. But the bank being perpendicular, and the fort placed very near the precipice, which is daily giving way, two of the bastions that face the river are in danger of being borne off by the first floods; the ditch and palisadoes having already shared that fate.

Near the fort are seven or eight houses or huts inhabited by Canadians, whose sole occupations are hunting, or dragging boats: they appeared poor and miserable.

The commander of this fort was Captain Pike, who treated us with great hospitality during the two days which we spent with him; but at the moment of our departure, whether from reflection, or whether he had received orders to that effect, as he told me verbally, he thought it prudent to arrest us. At five in the morning, Capt. Pike, attended by four fusileers and the whole of his staff, including the surgeon, planted himself in my boat, declaring to me with an air of dignity, that he thought himself obliged in conscience to arrest us, having been informed that I was indefatigable in taking the survey of

the Ohio, and of all the Western States. I immediately showed him the whole of my manuscripts, observing that they contained nothing but geographical notes and a few local remarks, which were more fitted to benefit than injure his fellow-citizens. He advised with his council; but neither any of its members or himself could read French, and there was a moment of suspense with respect to his decision; when an idea, which alarmed me extremely, presented itself to him;—that of sending my papers to Philadelphia, and taking the orders of government. The distance from Fort Massac to Philadelphia is at least a thousand miles. Fortunately, the surgeon, who was a man of sense, observed, that eight months must elapse before we could obtain an answer, and that it would be cruel to detain me and my suite during the whole of the winter, if, as he believed, I had done nothing contrary to the laws of the country; since every one had a right to travel in the United States, and even without a passport. Captain Pike was struck with the wisdom of this observation, and it was unanimously resolved that I might continue my journey, taking, however, on board an officer to attend me as long as I should remain in the territory of the United States; this commission was entrusted to Captain Taylor. Of Captain Pike's conduct we had upon the whole no great reason to complain: he

appeared to be a good man; and this little adventure proceeded rather from the jealous suggestions of some persons who surrounded him, than any hostile intention of his own.

Two miles below Fort Massac, on the left, we found a creek, called Massac's Creek, which is not navigable.

Immediately below Fort Massac the Ohio widens still more, and its course becomes slower, flowing along a low country. On the right we perceived a kind of natural dyke, which runs parallel with the banks of the river, but the lands behind are in general low and swampy.

We proceeded without finding any variation in the soil twenty-three miles. In this space the Ohio, which had run for some time towards the west, takes a sudden bend towards the south. We reached Cash Island, after having passed two creeks on our right and left, neither of which are navigable. The navigation during these twenty-three miles is perfectly good, and the depth of water from fifteen to twenty-five feet.

Passing Cash Island on our left, we took the channel on the right; carefully steering, however, as close as possible to the island, to avoid a sand-bank jutting out from the right.

Three miles below Cash Island, we left on the right Cash Creek, and six miles below this creek we reached

the mouth of the Ohio. The country continues low and swampy; the navigation regularly good, and the depth of the river scarcely ever varies from twenty to twenty-five feet.

The Ohio at its mouth offers nothing remarkable; its breadth is nearly the same as that of the Mississippi, and its banks are low and marshy, as well as the country on each side.

Opposite to its mouth the Ohio has deposited a great quantity of sand, which, forming a very considerable bank, bars a part of the Mississippi, and renders this passage extremely difficult: this we shall explain in the chapter that treats of the navigation of this river.

In general, the distances marked in Hutchins's charts, and others, are too great; particularly from the rapids to the mouth of the Ohio.

## CHAPTER XIV.

## TABLE

OF THE DISTANCES OF THE COURSE OF THE OHIO, FROM  
PITTSBURG TO ITS MOUTH,

From Pittsburg to	Miles.
HAMILTON Island . . . . .	1
The length of the island . . . . .	1 $\frac{1}{2}$
Long Island . . . . .	3
The length . . . . .	6 $\frac{1}{2}$
A small rapid . . . . .	1
A small and very low island . . . . .	3
Its length . . . . .	1
	<hr/>
	17

From Pittsburg to	Miles.
Brought over	17
Logstown . . . . .	6
Crow Island . . . . .	1
Its length . . . . .	1
Big Beaver Creek . . . . .	4
A small low island . . . . .	5
Its length . . . . .	2
Great Island . . . . .	2
Its length . . . . .	1
Bird Town . . . . .	2
Little Beaver Creek . . . . .	3½
Island without a name . . . . .	5
Two islands without names . . . . .	5
Yellow Creek . . . . .	3
The head of the first of the Black Islands	1
Their length . . . . .	5½
Judah Campbell . . . . .	1½
King's Creek . . . . .	2
Brown's Islands . . . . .	½
First houses in Mingo's Bottom . . . . .	5
Henderson Island . . . . .	3
Buffalo Creek . . . . .	3
Carpenter's Station . . . . .	5½
	<hr/>
	84½

From Pittsburg to	Miles.
Brought forward	84 $\frac{1}{2}$
Short's Creek . . . . .	4
The head of the first of the Three Islands	1
Their length . . . . .	4
Weeling Creek . . . . .	1 $\frac{1}{2}$
Mc.Mann's Creek . . . . .	2
Dely's Station . . . . .	5
Captel's Island . . . . .	4
Captel Creek . . . . .	2
Fish Island . . . . .	5
Its length . . . . .	1
Two small islands . . . . .	1
Sun Fish Creek . . . . .	5
Opossum Creek . . . . .	5
Fishing Creek . . . . .	8 $\frac{1}{2}$
Long Reach . . . . .	5
Its length . . . . .	12
Déchiquetée island . . . . .	8 $\frac{1}{2}$
Middle Island . . . . .	1 $\frac{1}{2}$
Its length . . . . .	5
French Creek . . . . .	3
The first of the Three Brothers Islands	1
Their length . . . . .	4 $\frac{1}{2}$
	<hr/>
	166

From Pittsburg to	Brought over	Miles, 166
Two small gravel banks	.	1 $\frac{1}{2}$
Calf Creek	.	2 $\frac{1}{2}$
Bull Creek	.	2
Little Muskingum	.	5
The head of Duval Island	.	1
Its length	.	2 $\frac{1}{2}$
Great Muskingum	.	1
A small creek	.	3
A small island	.	1 $\frac{1}{2}$
Another small island	.	3
A third island	.	3
Port Kanhawa	.	3
Belpré	.	1
Little Hock Hocking	.	7
Great Hock Hocking	.	6 $\frac{1}{2}$
Lee's Creek	.	2 $\frac{1}{2}$
Belleville Island	.	2
Devil's Hole	.	8
Anderson Island	.	6
A little low island	.	7
Abraham's farm	.	2
Two small islands	.	2

From Pittsburg to	Miles.
Brought forward	239
Length of the two small islands . . . . .	2 $\frac{1}{2}$
Mill's Creek . . . . .	$\frac{1}{2}$
The first island . . . . .	1
The second island . . . . .	2
Tartt's Fall . . . . .	2
Robertson Island . . . . .	19
Taylor Island . . . . .	3
Point Pleasant . . . . .	6
Gallipolis Island . . . . .	3
Its length . . . . .	2
A small island without a name . . . . .	4
Racoon Creek . . . . .	8
Little Guiandot . . . . .	7
Great Guiandot . . . . .	8
Twelve Poles Creek . . . . .	9
Great Sandy River . . . . .	6 $\frac{1}{2}$
A creek without a name . . . . .	3
A torrent . . . . .	12
Little Sandy River . . . . .	5 $\frac{1}{2}$
A creek eight fathoms wide . . . . .	13 $\frac{1}{2}$
Little Scioto . . . . .	2
Tiger Creek . . . . .	6
	<hr/>
	564 $\frac{1}{2}$

From Pittsburg to	Brought over	Miles.
		36 $\frac{1}{2}$
Great Scioto . . . .		5
Kenekena Creek . . . .		11
Turkey Creek . . . .		2
Michael Settlement . . . .		5
A prominent point . . . .		8
Salt works . . . .		2
Graham . . . .		9
Middle Island . . . .		3
Donaldson Creek . . . .		3
Three islands . . . .		5
Manchester . . . .		2
Izick's Creek . . . .		1
Cabin's Creek . . . .		5
Brush's Station . . . .		2 $\frac{1}{2}$
Limestone . . . .		4
Lawrence Creek . . . .		4
Eagle Creek . . . .		2
Red Oak Creek . . . .		2 $\frac{1}{2}$
Lee's Creek . . . .		2 $\frac{1}{2}$
Lee's Station . . . .		1
White Oak Creek . . . .		3
Bracking Creek . . . .		5

From Pittsburg to	Brought forward	Miles.
		447
Bull Skin Creek . . . .		3
Locust Creek . . . .		2 $\frac{1}{2}$
Hot Creek . . . .		3
A great bend . . . .		4
Twelve Mile Creek . . . .		12
Nine Mile Creek . . . .		3 $\frac{1}{2}$
Selma Creek. . . .		5
Little Miami . . . .		3 $\frac{1}{2}$
Cincinnati . . . .		9
Mill's Creek . . . .		2 $\frac{1}{2}$
Sym's Station . . . .		11
Great Miami . . . .		5 $\frac{1}{2}$
Tanner's Creek . . . .		3 $\frac{1}{2}$
Wilson Creek . . . .		1 $\frac{1}{2}$
Hogan's Creek . . . .		1
Woolper's Creek . . . .		3
Paroquet Island . . . .		3
Gunpowder Creek . . . .		7
Landing Creek . . . .		1
Big Bone . . . .		2
Steel's Creek . . . .		2 $\frac{1}{2}$
Creek without a name . . . .		5 $\frac{1}{2}$
		<hr/> 541 $\frac{1}{2}$

From Pittsburg to	Brought over	Miles.
		541 $\frac{1}{4}$
Elk Creek . . . . .		7
Cool's Station . . . . .		12
Indian Creek . . . . .		5 $\frac{1}{2}$
Kentucky River . . . . .		5 $\frac{1}{2}$
Little Kentucky . . . . .		2 $\frac{1}{2}$
Indian Kentucky . . . . .		6
Creek without a name . . . . .		4
Another creek . . . . .		3
Another creek . . . . .		10 $\frac{1}{2}$
Eighteen Mile Island . . . . .		12
A creek . . . . .		7
Twelve Mile Island . . . . .		5
Harrod's Creek . . . . .		4
Goose Creek . . . . .		1 $\frac{3}{4}$
Louisville . . . . .		8
Salt River . . . . .		28
Otter Creek . . . . .		6
Ohio-Pio-Mingo . . . . .		5
Does Run . . . . .		3
Falling Spring . . . . .		4
French Creek . . . . .		7
Buck's Creek . . . . .		6
		<hr/> 693

From Pittsburg to	Miles.
Brought forward	693
A small island . . . .	4
Another island . . . .	2
Windot's Creek . . . .	1
Preston Creek . . . .	10
Blue Creek . . . .	2 $\frac{1}{2}$
Helin's Creek . . . .	7 $\frac{1}{2}$
Dardada Island . . . .	2
Little Yellow Creek . . . .	8
Harden's Creek . . . .	4
A third creek. . . .	9 $\frac{1}{2}$
Clover Creek . . . .	5
Jefferson's Creek . . . .	6
Anderson's Creek . . . .	13
A slate-bank . . . .	2
Its length . . . .	2
Blackford Creek . . . .	8
A great sand-bank . . . .	2
Its length . . . .	3
Two islands . . . .	6
Yellow Bank . . . .	6
An island without a name . . . .	3
Another island . . . .	5 $\frac{1}{2}$
	<hr/> 803

From Pittsburg to	Brought over	Miles.
		803
Its length . . . .		1 $\frac{1}{2}$
Little Pigeon Creek . . . .		8
An island without a name . . . .		4 $\frac{1}{2}$
Its length . . . .		2 $\frac{1}{2}$
Green River . . . .		3
Pigeon Creek . . . .		9
A small island . . . .		6
Red Bank . . . .		6
An island . . . .		2 $\frac{1}{2}$
A bend . . . .		9
Diamond Island . . . .		5 $\frac{1}{2}$
Its length . . . .		4
A long island . . . .		7
High Land . . . .		10
River Wabash . . . .		7 $\frac{1}{2}$
The first of three small islands . . . .		2 $\frac{1}{2}$
Their length . . . .		4
A small island . . . .		4
Salt Creek . . . .		9
Trade Creek . . . .		8
The Cavern . . . .		7
A large island . . . .		1 $\frac{1}{2}$
		<hr/> 925 $\frac{1}{2}$

From Pittsburg to	Miles.
Brought forward	925 $\frac{1}{2}$
Its length . . . . .	3 $\frac{1}{2}$
A creek on the left side . . . . .	4
Another creek on the left . . . . .	1 $\frac{1}{2}$
A small island . . . . .	1 $\frac{1}{2}$
Another island . . . . .	3
The first of three small islands . . . . .	3
Their length . . . . .	4
A large island . . . . .	3
Another island . . . . .	3
Cumberland River . . . . .	3
Tennessee River . . . . .	10
Fort Massac . . . . .	11
Massac Creek . . . . .	2
Cash Island . . . . .	25
Cash Creek . . . . .	3
Mouth of the Ohio . . . . .	6
Total	<hr/> 1010



## CHAPTER XV.

*Military description of part of the Mississippi, from the mouth of the Ohio to the Illinois country.—Important remark.—Buffalo Island.—Temperature.—Elk Island.—Pointe à la Perche.—Charpon Islands.—Courcy Islands.—Unlucky accident.—English Islands.—Vines.—Chains of rocks.—Rapidity of the current.—Cape à la Cruche.—Quicksands.—Pelicans.—Cape Girardot.—Observation respecting the beavers.—Du Verrier Islands.—False Bays.—Marl River.—Apple River.—Muddy River.—The Tower.—Wandering Indians.—Necessary precautions.—Winged Islands.—Five Men Cape.—Dung Islands. St. Mary's River.—Recapitulation of the distances.—Reasons why a good map of the course of the river can never be obtained.*

**B**EFORE we speak of the Mississippi, that great artery of North America, it is necessary to make an observation.

Obliged, on leaving the Ohio and entering the Mississippi, to ascend a part of this last river, in order to gain the

Missouri; and anxious to give a successive view of objects such as we beheld them, our account of the Mississippi will necessarily be interrupted; that is to say, we shall first treat of the Mississippi from the Ohio to the Missouri, and shall not resume our account of that river as far as New Orleans, till we have finished our expedition into the country of the Illinois and the Missouri.

We began our course on the Mississippi the second of August. This day was one of the hottest we had felt in North America: Fahrenheit's thermometer had risen to ninety-seven. An hatchet exposed to the sun during an hour had acquired such a degree of heat, that we could not hold it in our hands. The wind was south, and the weather thick and hazy.

Immediately on entering the Mississippi, and after doubling the northern point which separates the waters of this river from those of the Ohio, we passed on the left a great sand-bank, called in the language of the country *batture*, formed by this last river. The sand-bank is long, flat, and covered with young poplars. At this point both sides of the river are low and swampy, and we saw nothing on the horizon which indicated that there were any lands more elevated within a certain distance. For this reason, the right side of the river, opposite to the mouth of the Ohio, will never be proper for the construc-

tion of any works, unless at an expence which would be useless in a country that is yet a desert.

Three miles from the mouth of the Ohio, in ascending the river, is an island on the left, called Buffalo Island, which is about a mile in length, well wooded, and high, with a blackish soil. We observed on both sides of the river, ranks of willows, all of the same height, resembling the finest Lombardy poplars, and arranged with so much symmetry that each tree seemed placed at equal distances, which viewed from the water produced a most beautiful effect.

After doubling Buffalo Point, we reached, at the distance of half a mile, Elk Island, which is newly formed. The willows we saw on this spot were not more than from two to three years growth. Both passages are equally good; nevertheless, when the waters are low, and in going up the river, the right side is to be preferred, leaving the island on the left.

We rowed by Elk Island a mile, and a mile and an half higher we reached on the right Pointe à la Perche, so called on account of the great quantity of willows with which it is bordered; these willows are still loftier than those we have just mentioned, some of them being sixty feet in height.

Between Elk Island and Pointe à la Perche the current is more gentle than from this island to the mouth of the Ohio, where it is so strong that we proceeded scarcely more than a mile in two hours; and this with such difficulty, that the best Canadian rower could not handle his oar more than a quarter of an hour without resting.

Half a mile higher than Pointe à la Perche, we reached on the right Charpon Islands: these are three in number, and they follow each other in succession; each is about a mile long, including the canals by which they are separated. The lands continue low and swampy to a very great distance on both sides, but they are of a fine quality, having from twelve to eighteen feet of vegetable earth.

Three miles above these islands we reached Courcy Islands: these are four in number, and occupy a space of two miles. The towing line is used for these three miles.\*

Before we reached Courcy Islands, we passed between two great banks, in order to gain the right side, leaving the islands on the right. This is the only side practicable for the towing line, the other being perpendicular and encumbered with trees, which renders this passage extremely difficult. With a line of fifty fathoms, though the waters are low, we found no bottom.

\* The towing line is made use of when the waters are low and the sand-banks dry: in high waters, or when the banks are steep, this mode is impracticable.

Immediately after passing the last of Courcy Islands, we steered to the left, in order to avoid a very dangerous sand-bank; there is a passage on the right, but the current is so strong, that it is practicable only in descending the river.

In crossing over, we met with a disagreeable accident: our boatmen, exhausted in striving to master the current, stopped on a sudden, when the boat drove with such violence and with so much force on a stump, which broke in its ribs, that we had only time to throw ourselves on the nearest of one of the islands, where we passed the rest of the day to repair the damage.

We learned with certainty, on leaving the Ohio, that from thence to the Missouri, we could never proceed faster than three leagues in a day, and sometimes only two. Although our boat had twenty oars, the rapidity of the current, the immense quantity of trees heaped together on both sides the river, and which sometimes filled half its bed; the transversal position of these trees, which changes the current of the river, and increases its rapidity, render this navigation very difficult and dangerous: we were continually in the alternative of breaking on the trees, or striking on the sand-banks.

We estimated the current of the river in this place at six or seven miles an hour, and often nine in channels

formed by the islands. The country continues to be low and swampy.

We proceeded nine miles and reached the English Islands, called by the Canadians Great Courcy Islands, and by the Indians Taiouwapeti. These islands occupy a space of six miles, and are twelve in number, ranged in groups of different sizes, and each affording a passage: it is, however, safest to leave them all on the right; not only because the current is less strong, but that nearly six miles are gained by taking the channel on the left. The navigation from Little Courcy Islands hither is good: the banks which are formed between them, and which are dry, make it very easy for towing.

We saw a great quantity of game of every kind on these islands, roebucks, bears, and buffaloes; we killed one of the latter. From the mouth of the Ohio to this spot we found neither creek nor river, nor saw any source whatever.

After passing the English Islands, we perceived that the lands begin to rise, and cease to be swampy; the soil, nevertheless, is poor, being either rocky or gravelly, mixed with reddish earth. At a distance we perceived a chain of heights, called Taiouwapeti Mountain, which runs north and south, parallel to the river.

The whole of this quarter is covered with vines of the large kind, which differs, however, from that which we found in the north, the wood not being so thick; the fruit is less, of a deeper red and sweeter: these vines climb to the tops of the loftiest trees.

At half a mile distance from the last of the English Islands, we found on the left side a chain of rocks, called the Little Chain. We kept to the right, and two miles higher we found a second, called the Great Chain, which extends into the middle of the river, and is a mile in length. The rocks that form this last chain being detached from each other, leave a number of small passages, which, although perilous, may be passed with less danger, aided by a good pilot, than the channel altogether on the right, where there is a current so strong, that it cannot be stemmed without much loss of time and considerable efforts, while amidst the rocks the water is almost stagnant.

After passing the Great Chain of rocks, keeping constantly to the left, the navigation continues gentle and easy. We sometimes proceeded a mile and an half an hour.

Here the ground on both sides rises in gentle slopes, and is no longer swampy; it is a mixture of rocks, gravel, and good soil. We beheld at intervals small rivulets, which take their sources in the heights of Taiouwapeti.

The quality of their waters is very inferior to that of the river.

The banks of the river are extremely dangerous in this place, from the quicksands which often shift, and on which no one can step without the risk of being swallowed up; our hunter had nearly perished in this manner, and was saved only by placing his fowling piece in a cross direction, when we instantly threw out cords and hawled him on board the vessel. These quicksands may easily be known by their lustre, which have the polish of glass, and by their humidity which resists the hottest beams of the sun.

We proceeded six miles, and reached, on the left side, Cape à la Cruche: it is a very elevated and perpendicular point, in front of which, and level with the water, is a nest of rocks which extends to some distance, and which is very dangerous. These rocks may easily be distinguished by the breakers.

The navigation during these six miles is good, if care be taken to keep on the left side.

Having reached Cape à la Cruche, we crossed a part of the river to gain an island on the opposite side, which is bordered by a great sand-bank, very conveniently situated for towing. We thus avoided a very strong current on the left, and which begins after doubling Cape à la Cruche.

Three miles above Cape à la Cruche, we passed on the left the small island of La Ferrière.

Towards four o'clock in the afternoon, we perceived in the horizon a kind of white riband of great length, which was a flock of pelicans, called by the Canadians *great throats*, coming from the north in their passage to the southward. They begin to arrive in this latitude, in the month of June, as the cold approaches. In the month of December, therefore, an innumerable quantity are seen at New Orleans, where they generally pass the winter, and hatch their young. These birds travel always in flocks; when they reach any great river, they range themselves all in one line, their heads turned against the stream, and thus suffer themselves to be carried down: they swallow all the fish that come in their way, and deposit them in the great bag. When the river is too narrow to contain a whole flock, they place themselves in a line of two deep: they prefer the Mississippi and the Missouri to every other river, on account of their muddy waters.

At the distance of a mile and an half above the island of La Ferrière, we reached Cape Girardot. We kept to the left side, to take advantage of a very strong eddy that reaches from this last island to Cape Girardot, which is the first military point on the river, from the mouth

of the Ohio;\* both sides being either swampy or broken by rocks.

Cape Girardot, on the contrary, is a block of granite, covered with a vegetable earth, about a foot in depth; it commands the whole river, which by means of a point, or very considerable alluvion, on the opposite side, is narrowed to the breadth of a mile at most. In order to avoid the shallows with which this alluvion is surrounded, all vessels that pass are obliged to keep very near the right side, which is within half cannon shot of the Cape.

The upper part of the block or eminence A, is commanded by no height; that part which fronts the river is steep and inaccessible; a large and deep defile surrounds it to the north and east: on the south is a gentle declivity, which finishes in low and sometimes marshy lands. The foot of the cliff affords shelter and excellent mooring for vessels.

Cape Girardot is, therefore, so situated as to supply what is wanting on the right bank of the Mississippi, at the point which corresponds to the mouth of the Ohio. Placed at forty-three miles and an half only above its mouth, this point commands whatever issues from that river, and covers perfectly on this side the place of St. Louis, from

\* It will be seen at the end of this survey, that this is also the first point on the western side of the river from New Orleans, which renders it so much the more important.

which it could receive succour in twenty-four hours. This leads us to think that the true station of the gallies is at this spot, where there is a fort respectable enough to protect them.

The importance of this post did not escape M. Laurimier, a Frenchman in the Spanish service, whose military talents and great influence with the Indian nations are very useful to this power. He has established himself there with the Chawanons and the Loups, whom he commands, and has a very fine farm, on which he resides.

The river in great floods rises here as high as seventy feet.

In one of the villages of the Loups which I visited whilst I remained at Cape Girardot, I found a white who had formed an establishment. This planter in clearing had destroyed a settlement of beavers: on examining, with the proprietor, the devastation which had been made in the dwellings and dikes of these industrious animals, we were struck with the appearance of one among those we had killed, the skin of which was totally without hair, and his body covered with scars. I conjectured at first that this was the effect of some malady natural to this species of animal; but my host, to whom I made the remark, informed me, that he was the slave of the family, and that a similar one was found in almost every habitation of the beavers.

“ In each family,” said he, “ there is one, which on his entrance into the world is destined to be the slave. The most servile and laborious occupations are his lot; among which is that of his serving as a traineau for the conveyance of wood. When the beavers have resolved on cutting wood, and it remains only to be carried off, the slave takes the stick between his fore feet; the free beavers, seizing him by the tail, drag him in this manner, nor is he permitted to quit his hold till he reaches home.”

If this be a fact, and I relate it with the same simplicity that it was recounted to me, it is not astonishing that the body of this animal should be scarified and deprived of its hair, by the continued friction he must have undergone, when dragged through briars, over stones and rocks. This at least is certain, that the beaver I saw was without hair, and covered with scars both old and newly made.

At the distance of half a mile from Cape Girardot, and on the left side, is a creek which is almost dry during the summer; and half a mile higher is the island Du Verrier, which we left on the right. The navigation during this mile is easy, but the island being very large, and narrowing the bed of the river, there is a very strong current in both channels. We quitted the left side, and crossed to gain the island, which is sur-

rounded with banks, that facilitate the use of the towing line.\* The left side of the river, independently of its extreme rapidity, is also filled with a considerable quantity of drift-wood, which chokes up half the channel; but these kinds of obstacles are but momentary; the next year they may totally disappear, and may probably embarrass some other point of the river.

After rowing by the island Du Verrier, which is two miles long, and proceeding three miles further, we reached False Bays, situated on the right side; we crossed again a part of the river, to gain a great sand-bank which is dry, and where the current is less strong. We left on the right, a mile from False Bays, an island without a name, which has been only formed within these two years. Two miles and an half above this island, we passed another on the right, of which the name is also unknown.

The current during these last two miles and an half is moderate, and the navigation easy; we kept to the right side, which is bordered with flat rocks, and convenient for mooring boats. A mile above this last island, perpendicular rocks rise on the right bank to the height of two hundred feet: the left side, on the contrary, is swampy.

\* These crossings are made with extreme difficulty, and however able the rowers, one and two miles are often lost in the passage: they ought, therefore, to be avoided as much as possible.

We rowed the length of a mile along this iron rampart, and reached on the same side Marl River (*Rivière de Glaise*), which is full of a clay of this nature. The river is about forty or fifty yards wide at its mouth, runs through low and swampy lands, and is almost dry during the summer.

Four miles above, and on the same side, Apple River (*Rivière aux Pommes*) empties itself. This river is from eighty to ninety yards in breadth at its mouth, and though its waters are low in dry seasons, there is nevertheless enough for the navigation of canoes.

Directly opposite to Apple River, Mud River (*Rivière aux Vases*) flows into the Mississippi. Its mouth is concealed by a very considerable island, which forms two passages; the first, in ascending the river, is the best. This river is navigable sixty miles for canoes, during the whole year; the country through which it flows is extremely fertile, but swampy to a great distance.

Four miles above Mud River, and on the right side of the Mississippi, is the Tower; a name given to a great mass of rocks, at nearly fifty yards distance from the right bank. Its round form, insulated situation, and lofty height, led the first navigators to give it this appellation. This rock offers nothing curious,\* excepting the immense quan-

\* If this rock were not commanded by the right bank, it would form a very important military point.

tity of birds of every kind to which it affords an asylum. Six weeks previous to our arrival here, an American family, composed of twelve persons, were all massacred. They had taken their station, at the close of the evening, opposite to the Tower, on the left side of the river. Soon after their landing, two Chickasaws came to visit them with a friendly air, asking them for provisions and rum, which were given to them, and they appeared to go away highly satisfied. But at daybreak a troop of twenty Indians fell upon this unfortunate family, and massacred men, women, and children, without mercy. These murders are very common, and are committed almost always by Indians proscribed and driven from their tribes for robbery or some bad action; the vagabonds then wander through the woods, and rob and kill all they meet. These depredations are in general committed by the Chickasaws; sometimes, however, massacres take place by way of reprisal. If an Indian be killed by a White, as soon as the news reaches the tribe, the whole nation swears vengeance, and that the same quantity of blood which has been taken shall be shed: after which, the first White that presents himself, whether a stranger or no, becomes their victim. When such attacks are to be apprehended, it is prudent to encamp in one of the small islands, after having well examined it; or what is still better, to anchor always at

a little distance from the shore. To this precaution, which we cannot too strongly recommend to those who travel in these deserts, we owe the preservation of our own lives.

Leaving the Tower, we proceeded three miles and an half, and reached Winged Island (Isle aux Ailes), which we left on the right. In this space there are several eddies on the left side, which favor the ascent of the river; the current is very strong on the right.

Four miles and an half above Winged Island is Five Men Cape (Cap des cinq Hommes), situated on the left side. It is known by the long line of rocks which precedes it, and which though joined to the bank, extends far into the river. These rocks form very violent currents, but beyond them the navigation becomes smooth and easy.

Three miles above Five Men Cape are Dung Islands (Isles à la Merde) :<sup>\*</sup> these are four in number, and extend nearly three miles. We passed them on the left, and half a mile higher we reached the river St. Mary, situated on the same side. Opposite its mouth is a little island, called Perch Island (Isle à la Perche), which we left on our right.

A mile and an half above Perch Island, we reached the island of Kaskaskias,

<sup>\*</sup> These disgusting appellations seem to characterise the state of the people.

From Five Men Cape the navigation is good, and even easy, but care must be taken when at Perch Island, to cross the river and gain the right side, where the current is much more gentle than on the left.

A mile above the island of Kaskaskias, we reached the mouth of the river which bears this name.

The appearance of the country from Cape Girardot to this place, varies but little; every where we find small rocky heights, intersected by vallies, which are often overflowed. Excepting Cape Girardot, the whole of this country, from the Ohio to Kaskaskias, is uninhabited.

The river Kaskaskias is nearly one hundred and twenty yards broad at its mouth, and affords in every season a gentle and safe navigation for all kinds of boats. The village of Kaskaskias, situated ten miles from the mouth of the river, is the first settlement in the country of the Illinois.

From Kaskaskias to Salt River is reckoned ten miles; from thence to St. Geneviève four; from St. Geneviève to Fort Chartres twenty; to Joachim River eighteen; to Marimeck river fifteen; to the village of Carondelet fifteen; to St. Lewis ten; and to the Missouri four.\*

The whole navigation from the river Kaskaskias is excellent, and traverses a country very well inhabited, called the Illinois.

\* See the description of the country of the Illinois.

## RECAPITULATION OF THE DISTANCES

FROM THE MOUTH OF THE OHIO TO THAT OF THE MISSOURI.

From the mouth of the Ohio to	Miles.
Buffalo Island . . . . .	5
Its length . . . . .	1
Elk Island . . . . .	$\frac{1}{2}$
Its length . . . . .	1
Pointe à la Perche . . . . .	$1\frac{1}{2}$
Charpon Islands . . . . .	$\frac{1}{2}$
Their length . . . . .	5
Courcy Islands . . . . .	5
Their length . . . . .	2
English Islands . . . . .	9
Their length . . . . .	6
Little chain of rocks . . . . .	$\frac{1}{2}$
Great chain . . . . .	2
Cape à la Cruche . . . . .	6
Island à la Ferrière . . . . .	5
Cape Girardot . . . . .	$1\frac{1}{2}$
Island du Verrier . . . . .	1
	<hr/>
	44 $\frac{1}{2}$

From the mouth of the Ohio to					Miles.
Brought over					44½
Its length	.	.	.	.	2
False Bays	.	.	.	.	3
Marl River	.	.	.	.	5½
Apple River	.	.	.	.	4
The Tower	.	.	.	.	4
Winged Island	.	.	.	.	3½
Five Men Cape	.	.	.	.	4½
Dung Islands	.	.	.	.	3
Their length	.	.	.	.	5
River St. Mary	.	.	.	.	1
Kaskaskias Island	.	.	.	.	1½
Salt River	.	.	.	.	10
St. Geneviève	.	.	.	.	4
Fort Chartres	.	.	.	.	20
Joachim River	.	.	.	.	18
Marimeck River	.	.	.	.	15
Carondelet village	.	.	.	.	15
St. Lewis	.	.	.	.	10
The Mouth of the Missouri	.	.	.	.	5
					<hr/> 176½

The most valuable information which we acquired during this short passage, respecting the navigation of this river, as well from our own observations as the different accounts which we could procure, was, that whatever talents, patience, and courage may be exercised in undertaking this expedition, there are obstacles which will for ever render it impossible to obtain either charts or any certain details respecting the course of this river, which can serve either as a guide or instruction to travellers.

The Mississippi has not only the inconvenience of being of an immense extent, of winding in a thousand different directions, and of being intercepted by numberless islands; its current is likewise extremely unequal, sometimes gentle, sometimes rapid; at other times motionless; which circumstances will prevent, as long as both sides remain uninhabited, the possibility of obtaining just data with respect to distances. But an insurmountable obstacle will always be found in the instability of the bed of this river, which changes every year: here a sharp point becomes a bay; there an island disappears altogether. Further on, new islands are formed, sand-banks change their spots and directions, and are replaced by deep channels; the sinuosities of the river are no longer the same: here where it once made a bend it now takes a right direction, and there the straight line becomes a curve: here ravages

and disorders cannot be arrested or mastered by the hand of man, and it would be extreme folly to undertake to describe them, or pretend to give a faithful chart of this vast extent of waters, as we have done of the course of the Ohio, since it would not only be useless but dangerous. It is for these reasons that we shall confine ourselves, as we proceed, to general ideas with respect to the navigation of this river, and treat in detail only of the most striking military points situated on its current. If from the Ohio to the river Kaskaskias we have deviated from this rule, it is because that part of the river is reckoned the most difficult, and also varies less on account of the two chains of heights which bound its banks, and which fix and master its course.



## CHAPTER XV.

*Country of the Illinois.—Period at which the French established themselves.—Character of the inhabitants.—Sketch of the country.—Observations on the mountains.—Conjectures.—Objections.—Communications.—Meadow of the Rock.—Fort St. Charles.—St. Philip.—New design.—Hull's Station.—Salt Works.—Bound Station.—Indian tombs.—Meadow of the Bridge.—Observations.—Kaokias.—Singular country.—St. Lewis.—Fort.—Military position of St. Lewis.—Florissant.—Marais des Liards.—St. Geneviève.—Lusière.—Mines.—Water carriage.—Nomenclature of different gramina.—Plan of an intrenched camp.*

THE country of the Illinois is situated between the thirty-seventh and forty-fifth degree of northern latitude. The French took possession of this province in 1681, at the same period that William Penn laid the foundation of Pennsylvania.

The settlements on the Spanish side begin from Salt River, and terminate at the Missouri, on the right bank of the Mississippi: those on the American side begin at the river Kaskaskias, and end at Dog's Meadow (Prairie du Chien).

The French settlements which still remain, situated on the Spanish side, are St. Geneviève, St. Lewis, Florissant, and St. Charles. This last is formed on the left side of the Missouri.

On the American side there are still some French at Kaskaskias, the Meadow of the Rock (Prairie du Rocher), St. Philips, Kaokias, Piorias, on the Red River, at Dog's Meadow, near the Ouiscousin, Chicagou, on the lake Michigan, and at Post St. Vincent's, on the Wabash.

These people are, for the most part, traffickers, adventurers, hunters, rowers, and warriors; ignorant, superstitious, and obstinate; accustomed to fatigue and privations, and stopped by no sense of danger in the undertakings they form, and which they usually accomplish.

In domestic life, their characters and dispositions are similar to those of the Indians with whom they live; indolent, careless, and addicted to drunkenness, they cultivate little or no ground, speak a French jargon, and have forgotten the division of time and months. If they are asked at what time such an event took place, they answer, "in the time of the great waters, of the straw-

berries, of the maize, of potatoes:" if they are advised to change any practice which is evidently wrong, or if observations are made to them respecting the amelioration of agriculture, or the augmentation of any branch of commerce, the only answer they give is this: "It is the custom; our fathers did so: I have done well; my children will do the same." They love France, and speak of their country with pride.

The province of the Illinois is perhaps the only spot respecting which travellers have given no exaggerated accounts: it is superior to any description which has been made, for local beauty, fertility, climate, and the means of every kind which nature has lavished upon it for the facility of commerce.

This country is a delightful valley, where winds one of the most majestic rivers on the globe, and which, after receiving the vast Missouri, is still augmented by an infinite number of smaller rivers and creeks, all navigable, and fitted for the construction of mills and machinery of almost every kind.

This valley is full of small lakes and villages, and interspersed with woods and natural meadows, strewn with medicinal and odoriferous plants. Across these meadows flow numerous rivulets, sometimes murmuring beneath the flowers, and sometimes displaying their silver

beds and their transparent waters, pure as the air which is breathed amidst those romantic spots. On each side of these vast meadows, which are level as the surface of the calm ocean, rise lofty and venerable forests, which serve as boundaries, while their thick and mysterious shades fill the mind with reverential awe and enthusiastic contemplation.

This valley is bounded on the right and left by two small chains of mountains running parallel with the banks of the river, but never more distant than four or five miles.

The chain on the east begins to be perceived from the mouth of the river Kaskaskias, and runs in the same direction as far as the Dog's Meadow, situated two hundred and forty leagues higher.

The western chain is visible from Cape Girardot, and runs in the same direction, nearly at the same height, and following the same bendings as that of the east.

These small chains rise commonly one hundred and fifty and sometimes two hundred feet above the level of the lands which separate them from the waters of the river. These masses of rock are composed sometimes of greystone, flint, with which the Indians tip their arrows, or millstone, but most frequently of limestone.

The lands which run along between these chains and the bed of the river, form, as I have already observed,

vast meadows intersected with small woods: the whole of these lands are the product of successive dépôts, occasioned by the overflowings of the river. Trees half burnt are often found in digging, together with pieces of earthen and iron utensils. The whole is a bed of sand, the surface of which is covered by a vegetable layer, four or five feet in thickness.

It is probable that both these chains have been washed by the river: the different shells which are found incrustated, the constant parallelism of their layers with the horizon, and which is seen marked in the rocks, lying in the same direction, and the correspondent angles of these chains, are indications which support this conjecture. Here, nevertheless, a great difficulty presents itself; which is that of knowing how the river could at once have covered these two chains.

Many persons, and we were of the number, perplexed at the idea of the quantity of water necessary to cover this surface, suppose that the Mississippi may several times have changed its bed, and have flowed at different epochs over certain parts of these two chains; but the correspondence of the angles, the constant opposition of the concave with the convex parts, which so well demonstrate the course of the waters, oppose this hypothesis, and wo

are brought back, almost irresistibly to believe that these two chains were once the two banks of the river.

In fact, had not the Mississippi washed at the same time both these chains, they would not always have run parallel and without interruption, and breaks would have been found at intervals, such as are observed in the current of the Ohio.

It may be inquired what is become of all the water which was necessary to fill so broad and deep a bed? The following is the most satisfactory solution which we could find of this difficult question.

When in descending the Mississippi we consider with attention the direction of these two chains of mountains, we observe that the nearer we approach the sea, the further they fall back from each other; till, at length, that on the western side flies off, and disappears altogether towards the Attakapas; whilst that on the east directs itself towards the mountains in the south of Florida.

From the point where these two chains are no longer visible, we find a prodigious extent of productive land, sometimes fifty leagues in breadth.

At thirty leagues from the mouth of the river is situated New Orleans, which is distant from the gulf of Mexico on the right and left, only two leagues. In the midst of

this peninsula runs, in different channels, the Mississippi, by which alone it could have been formed.

We know, also, that formerly this town was very near the mouth of the river, and consequently at a small distance from the sea shore. Admitting this to be the case, if we could carry back in our imaginations, above the Illinois, all the earth which has been washed down and deposited by the current in the stretch of land, which is now below New Orleans, we shall be convinced that the quantity of water necessary to fill and cover the space which then existed between the two chains, could not be immense, and that its volume appears insufficient at present, only from the changes which the water has itself produced. Besides, in the month of April, 1784, when a considerable inundation took place, the river reached from one chain to the other, and carried a barge from Kaskaskias to Kaokia, across the meadows and low lands which were under water. There are, moreover, strong conjectures that the lakes Michigan and Superior emptied their waters formerly into this river. The evidence for this conjecture is, that when the waters are high, boats carrying from fifteen to twenty thousand weight pass from the Illinois river to the lake Michigan, without portage, by traversing a marsh which joins the sources of the river Illinois with those of the river Chicaco, which now discharges itself

into the lake Michigan. The Ouisconsin affords a similar proof.

No one is ignorant that Canada has suffered very considerable earthquakes; such, for example, as happened in 1665, when in a single night twenty-six shocks took place. The history of this colony informs us, that these earthquakes were felt over an extent of country more than one hundred leagues in breadth, and three hundred in length, from the mouth of the river St. Lawrence running to the West.

It is very probable, therefore, that the bed of granite which forms the cataract of the Niagara has been sunk in one of these violent commotions, and that previous to this convulsion of nature the waters of the lake emptied themselves into the Mississippi; this hypothesis explains easily how the waters of that river might have washed at the same time both the chains which filled the vast void that now exists; since the greater part of these waters at present discharge themselves into the river St. Lawrence.

But I offer this solution as the opinion of an individual little enlightened on a subject so abstruse, and which I leave to the meditation of those who are more conversant than myself with the secrets of nature.

There are two communications by land from Kaskaskias to Kaokia; one called the lower road, the other the upper. The first is practicable only during the summer, the second the whole year.

From Kaskaskias to the Meadow of the Rock is reckoned fifty miles, and the road lies across natural meadows and a soil extremely loamy, which renders it impracticable in rainy seasons. The vegetation of this soil is so luxuriant, that a man on horseback is covered by the height of the grass; we measured some stalks, which were twenty-one feet high.

The Meadow of the Rock is a small village situated at the foot of the chain of rocks, of which we have given the description; its population is composed of eighty or an hundred inhabitants at most, and the greater part are the produce of a mixture with the Indians.

At the Meadow of the Rock are two roads; that on the right goes across the heights; the left, which is the continuation of the lower road, traverses the meadows. A mile beyond the Meadow of the Rock, on the left, is a path now covered with grass, the track of which is scarcely to be seen. This path leads to Fort Charles, situated on the banks of the river, at the distance of a mile: its ruins are the only vestiges that remain of the power by which it was erected. This fort was begun by the French India

Company in 1754, and finished in 1762, precisely at the period of the peace by which we lost our territorial possessions on this continent. Its form is square, with four bastions finely proportioned and covered with freestone. A wall surrounds it six feet thick and twenty high, with crannies and embrasures: opposite and parallel to the curtains are four large and magnificent buildings, one of which was destined for officers, one for the garrison, and the two others for military stores. The whole of these buildings are made of freestone, and raised on arches. This establishment was constructed with so much solidity and care, that in spite of time and the neglect in which it is left, the wall and buildings are still in good preservation: the timber has been taken away.

In front of the curtain which faces the river, are seen the remains of a very fine battery of six pieces of twelve that defended the passage of the river, by means of an island which is opposite, and narrows its bed. At a quarter of a mile from the fort, on the left, are the ruins of Chartres, covered with wild herbs.

Proceeding seven miles by the road on the right, reckoning from the point where it separates, leading to St. Charles, we reached St. Philip, which is a new settlement, and contains seven or eight families, among which are a few Americans. This space is intersected

with woods, with natural meadows, and some marshes, which render St. Philip's unhealthy.

Two miles from thence is another crossway; the road on the right goes to New Design, and meets that which leads to the Meadow of the Rock; the road on the left goes into the valley.

Five miles further we reached Hull's Station, which is agreeably situated at the foot of the chain of mountains, on a small platform, high enough not to be incommoded by the thick and foggy air which spreads over the meadows. This station is composed as yet but of two houses, inhabited by Americans.

Eight miles beyond Hull's Station are the Salt Works: two roads lead to this place; that on the right is the most direct and the best, following the base of the mountain; the left leads through the meadows.

From the Salt Works to Bounds Station is a distance of five miles, which lie across a country alternately wood and meadow ground. On the left is a very considerable pond, filled with an innumerable quantity of water fowl of all kinds; this point is unhealthy during the summer.

A few miles beyond Bound's Station we passed some small huts on the left, newly constructed. Sixteen miles farther, following the course of the meadows, which are of an immense extent, we found several small mounds

regularly ranged in a circular form: these were ancient Indian tombs.

Three miles further we reached the Meadow of the Bridge, leaving on the right a road which leads to the heights. The whole of this space is intersected with large ponds, some of which are three or four miles long, and one broad: these stagnant waters occasion, by their exhalations, many fevers in the autumn, and on this account the Meadow of the Bridge is very little peopled, the greater part of the inhabitants having gone over to the Spanish side.

Observing the level of the waters of the river, when it is low, and that of the waters of the lakes, we perceived that it would be very easy to dry up the latter by means of a few drainings, which might be cut across the meadows; but indolence and the want of population are impediments to this measure, and the inhabitants prefer changing their settlements to the labor of ameliorating those they already occupy.

From the Meadow of the Bridge to Kaokia is only a mile.

Kaokia is situated at the extremity of this immense and beautiful valley; it contains about three hundred families, of which there are an hundred men capable of bearing arms.

## RECAPITULATION

## OF THE DISTANCES OF THE LOWER ROAD.

	Miles.
From Kaskaskias to the Meadow of the Rock	14
To St. Philip . . . . .	8
Hull's Station . . . . .	7
Salt Works . . . . .	7
Bound's Station . . . . .	5
Indian Tombs . . . . .	16
Meadow of the Bridge . . . . .	3
Kaokia . . . . .	1
	<hr/> 61

Leaving the Meadow of the Rock, the road turns short to the right, passing a hollow which is very narrow, and following on the left a rivulet which is fordable at the distance of two miles. After climbing during a mile a very steep ascent, we reached a platform, which presents the view of a very singular country.

This country can neither be termed wood nor meadow; the trees with which it appears to be covered, are so thinly scattered, that the intervals are so large as not to intercept the light. Neither a thorn nor a shrub are

to be seen, and only one kind of wood, the post oak, the trees of which are all of the same size and height. The ground is covered with grass of an excellent quality for cattle.

The singular aspect of this country can be attributed only to a custom among the Indians of setting fire every autumn to the grass and dead leaves of the forests, which destroys the whole, except this kind of oak.\* It is to be observed, also, that this oak is smaller, and not so lofty as those of other forests, where this accident has not taken place, and its bark is almost black. It is clear of branches, both great and small, to the height of twenty or twenty-five feet. The principal use of this timber is for inclosures or barriers, and it is as serviceable as cedar for these purposes.

\* When a traveller is surprised by one of these fires, which happens commonly in the autumn, and sees the conflagration advance, which generally spreading over the whole extent of the meadow, runs rapidly on when aided by the wind, the only measure to adopt, in order to preserve himself from a danger so imminent, is to light a fire behind him; by this means, the grass is already burnt when the devouring flame reaches the spot, where finding nothing more to consume, it stops and is necessarily extinguished. For this reason every one who travels in the autumn, amidst these plains, cannot be too strongly recommended to provide himself with a tinder-box, which the inhabitants of the country are careful to do, since their lives are so nearly concerned.

The whole of this country is a gentle undulation; not a single rivulet is to be found, but there are a great number of springs of pure and limpid water.

The quality of the land is excellent; its vegetable layer is about three feet in depth. Great holes of a singular form are frequently seen, which have the figure of a cone reversed, or kind of funnel, the upper part of which is about one hundred yards broad, and thirty, forty, and fifty feet in depth. Several of these have very plentiful springs of water; others are entirely dry during the summer: the issue cannot be traced by which the waters run off.

The same country and the same aspect continues without any variation till within three miles of Kaokia, when the upper road falls into the plain at Pickset's Station, and joins, six miles farther on, the lower road.

The upper road is every where very good, except for carriages; it is military, not only as it holds the summit of the whole country, but that by means of its undulations, every movement may be kept out of sight of the enemy.

## DISTANCES OF THE UPPER ROAD.

From Kaskaskias to the Meadow of the Rock	14
To New Design . . . . .	20
Belle Fontaine . . . . .	2
Pickset's Station . . . . .	16½
Kaokia . . . . .	12
	<hr/>
	64½

Independently of these two roads, there is another which communicates from Kaskaskias with Post St. Vincent's, and leads almost continually across fine natural meadows. The distance is computed at one hundred and fifty miles, which may be passed in five days on horseback; but this road is impassable for any carriage.

These natural meadows are highly agreeable to the traveller, who passes them without suffering any of the inconveniences which he finds in the forests, such as reptiles and insects; since it is well known that the moschettoes, with which the woods are filled, and which are so troublesome, cannot bear the light; much less the rays of the sun, by which they perish: they can only exist amidst damps and darkness. With respect to reptiles,

they must be extremely rare in these meadows, which are consumed every autumn by the Indians.

Two miles above Kaokia, and on the right bank of the river, is situated the town of St. Lewis, or Pincour, on a platform high enough to be at all times out of the reach of inundations.

The population of this town is estimated at six hundred inhabitants, of whom two hundred, all French,\* are

\* A circumstance worthy of notice, with respect to our national character, is, that we never incorporate, generally speaking, with any other nation; wherever we go, we wish to plant ourselves, to introduce our own tastes, manners, customs, and language. It is to this generous pride that we must attribute that marked difference which exists in the mode of our forming settlements in foreign countries, from that of other emigrants. The French unite, and form themselves into towns and villages, whilst others disperse and melt into the mass of the people amongst whom they dwell, as may be observed in the United States.

This love of our country, this national prejudice, far from being a subject of ridicule, as it has been treated by some modern writers, ought rather to be regarded as a virtue, of which wise governments know how to take advantage. Who knows if Louisiana and Canada would not have balanced the immense influence which England has obtained in the United States, if France had supported her colonies, as those of the English have been protected by their government. England owes her influence to the introduction of her manners, her customs, her language, her religion, and her marine; I say, her marine, because to be master of the world, it is necessary to be sovereign of the sea. This political axiom is of ancient date; the Greeks transmitted it

capable of bearing arms. These men are less degenerate than the race which dwell on the American side; we found among them that sentiment of attachment to their country which characterises the French nation; they appeared to be excellent patriots, whose lives and fortunes are devoted to France; families of laborers in easy circumstances, and prosperous merchants. The people in general would be happy, were it not for the viciousness of the administration, which grants exclusive privileges to strangers for the fur trade; privileges always odious to the people and ruinous for the states, since they annihilate industry and destroy emulation.

It might easily be presumed from the situation in which we found the forts, and the weakness of the garrison, which consisted of seventeen men, that Spain had the intention of abandoning Upper Louisiana.

At the time this post was menaced by Genet's expedition, ill combined and still worse directed, a paltry square redoubt was constructed, flanked by four bastions, the sides of which were precisely two feet and an half, (the space of a single man) and surrounded with a ditch

to the Romans, and it has since been adopted by every nation: it is in this sense that one of our tragic writers (Lemierre) says:

“ Le trident de Neptune est le sceptre du monde.”

two feet deep and six in breadth, with an inclosure of crannied planks. A garrison of seventeen men and the inhabitants, all devoted to France, were charged with the defence of this post.

The order of the commander was the only thing reasonable in this extraordinary defence of Upper Louisiana: it stated in substance, that immediately on the appearance of the enemy, the garrison should retreat to New Madrid. We shall speak of that place at the end of the work.

The position of St. Lewis, five leagues from the mouth of the Missouri, and eight from that of the Illinois, considered in a military point of view, is one of the best on the river Mississippi. If it were put into a respectable state of defence, it would cover Upper Louisiana, and prevent every irruption by the Upper Mississippi, the Illinois, and the Missouri; commanding, at the same time, the Western States and Upper Canada, each of which might be invaded by three different roads: the first in ascending the Mississippi, and the Ouiscousin, from whence a carrying place of three miles leads to Fox River and Green Bay, which makes part of Lake Michigan; the second by ascending the Illinois river, and gaining by Chickago the sources of the river Kennomick, which empties itself likewise into the same lake; this may be effected in high waters without carriage, by traversing

a marsh where there is four or five feet of water; and the third, in proceeding from Kaskaskias, and gaining the post of St. Vincent's by a fine communication of one hundred and fifty or one hundred and sixty miles across a country of natural meadows, and afterwards ascending the Wabash as far as the sources of the river Miamis, the waters of which fall into Lake Erie.\*

St. Lewis can also oppose every irruption by the Ohio against New Madrid; that town being situated above the mouth of the river at the distance only of fifty leagues, this space might be run in thirty-six hours with galleys; the advantages of being master of the current, in the navigation of a river, are still more decisive than having the wind at sea.

If we consider St. Lewis in a commercial point of view, we shall find its position still more fortunate. This place will stand in the same relation to New Orleans, as Albany to New York: it is there that will be collected all the produce transported by the great rivers which meet near this point, after traversing such fine and fertile countries. It is there that the traders would bring all the fine furs of the Missouri, and other adjacent rivers;—a source of inexhaustible riches for more than a century.

\* See the particular description of each of those rivers.

It is at St. Lewis that a stop may be put to the invasions and usurpations of England. St. Lewis will become the military point for the defence of the head of the Mississippi, and the mouth of the Missouri, and to support the different posts which might be formed upon this river: it will be the central point for all internal administrations, and from which the traders\* will take their departure. Upon the whole, it will be by St. Lewis that the communication will be opened with the Southern Ocean, and its waters connected with those of the Gulf of Mexico; and this may be effected with more facility, more safety, and with more economy for trade and navigation, than in any other given point in North America. §

These considerations, which even the peace cannot annul, decided the French plenipotentiary to propose to the Spanish minister on my return in the month of January, 1797, the plan of defence which will be found at the end of this chapter; a plan which may be considered as only temporary, but which may one day serve as the basis of a plan of defence more mature and complete, when circumstances, time, and experience shall have furnished easier means of examination, and more exact

\* Those who are here called traders, are persons who traffic with the Indians for furs.

§ See the description of the Missouri.

details than those which could be collected in a situation so delicate as that in which we undertook the survey of this place.

Four leagues to the north of St. Lewis, and a league from the mouth of the Missouri, a new settlement has been formed, called Florissant, which contains already thirty families, the greater part American, and all good farmers.

A mile west of Florissant is another settlement formed by the French, called Marais des Liards, which contains an hundred families. Two leagues and an half farther on towards the north-west, and on the left of the Missouri, is situated the last settlement of civilised men, called St. Charles, containing two hundred families, all traders or hunters.

Twenty-four leagues to the south of St. Lewis, and on the same side, is situated the small town of St. Geneviève, vulgarly called by the people *Misère*. It was originally built on the banks of the river, but the frequency of the inundations forced the inhabitants to transport their settlement two miles back at the foot of a small height: there are still a few huts remaining, inhabited by the traders of the old village.

This little town contains at present twelve hundred inhabitants of both sexes, whites and blacks, slaves and

freemen, of which two hundred and forty bear arms; but out of that number, sixty only can be considered as soldiers.

On the upper part of the platform on which St. Geneviève is situated, stands a small fort, of the same form and constructed with the same kind of materials as that of St. Lewis; that is to say, square, and surrounded with planks to support the earth, and serve at the same time for palisadoes. Two pieces of iron cannon of two pounders, a corporal and two soldiers, were at this time the sole defence of the place.

This position on the whole is extremely bad, being much too distant from the river to protect its navigation. The fort on the south-east side is entirely under the command of the platform on which it is built; the farther you go to the back of this position, the more the ground rises gradually; and these heights being connected with each other a great length of space, and commanding each other successively, it is impossible to occupy them all at once. This situation ought therefore to be abandoned as an intermediary point between St. Lewis and the Ohio, as had been once projected. We shall take occasion to point out another far superior in all respects.

Two miles to the south-east of St. Geneviève, on the height, is an increasing settlement, called Lusière: this is

a concession which has lately been made by the government to a French refugee of this name, who fled, like many others, from assassins and executioners.

Two leagues from St. Geneviève, towards the sources of a rivulet which empties itself into the Mississippi, is a lead mine and a lime quarry, both of which are at present worked, on the heights of Marimeck. An iron mine, extremely rich, has been lately discovered, but is not worked for want of hands and means. Mr. Burd, an inhabitant of New Jersey, and in partnership with Robert Morris, has visited it and extracted several pieces of ore, which have been found by professional men to be of the first quality: this mine is so much the more precious, as it is the only one of the kind hitherto known in Upper Louisiana. We brought away specimens of these various minerals.

All conveyances from St. Geneviève to St. Lewis are made by water; no communication by land for carriages having yet been opened: the road at present is practicable only for horsemen and foot passengers.

The passage of the river, in the communication of St. Lewis with Kaokia, either from St. Geneviève to Kaskaskias, or across the Missouri from St. Lewis to St. Charles, is made with canoes of different sizes; but these boats are not large enough to carry either horses or

carriages; the horses are commonly made to swim across the stream.

## RECAPITULATION OF THE DISTANCES

### FROM ST. LEWIS TO THE NEIGHBOURING VILLAGES.

Spanish side.	Leagues.
From St. Lewis to Florissant . . .	4
From St. Lewis to Marais des Liards . . .	4½
From St. Lewis to St. Charles . . .	6
From St. Lewis to St. Geneviève . . .	24

Independently of the description which we shall give under the article of agriculture, of the vegetation that clothes and the productions that enrich this fine country, we deem it necessary to add, that it abounds in all kinds of gramen, from dog's grass to reeds thirty feet high; the great and lesser kinds of mallows, violets, nettles, dandelions, maiden hair, ferns, horsetail, thistles, briars, squinant, iris, cresses, milfoil, St. John's wort, centaury, hen bane, pellitory of the wall, vervain, mint, thyme, burdock, endive, hops, storksbill, purslain, sowthistle, woodsorrell, melilot, trefoil, luzerne, Venus-navel, ginger, gentian, the second and fourth species of ipecacuanha, the bastard senna, the bastard indigo, three kinds of sensitives,

camomile, bugloss, comfrey, wild marjoram, sage, mother wort, wormwood, poppy, terragon, pumpkin, sorrel, strawberry plant, asparagus, golden rod, scabious, the winter cherry, lilac, palma-christi, Indian fig-tree, rosemary, marjoram, several of the flowers cultivated in Europe, the great blind nettle, blind oats, white root, red root, the spindle tree, the liana, dragon's blood, geranium, and fumitory, friends-root, white meadow wood, the tea-tree of Labrador, and the Obelia.

The trees most common are five or six kinds of walnut-trees and of oaks, the mulberry-tree, apple-tree, pear, plumb, and cherry-trees; the ash, the willow, the elm, the hawthorn, the poplar, the beech, laurels, acacias, plane trees, pines, firs, red and white cedars, the cypress, peach-trees, fig-trees, and chesnuts; pomegranates, the thorny ash, the small cotton tree, and the little oak. We found, also, the orange, lemon, and lime trees, with every other production of the most favored climes.

Every season presents its peculiar vegetable productions; it would, therefore, be almost impossible for a single individual to examine and give an exact enumeration of the whole. We collected our information on this subject from Mr. Perron, who had resided in Upper Louisiana ten years, and who had been continually employed in the study of natural history.

## PLAN

## OF AN INTRENCHED CAMP UNDER ST. LEWIS.

St. Lewis is situated on the slope of a curtain D, which descends, by insensible degrees, to the banks of the Mississippi.

This curtain is commanded by the height E, and the small curtain F, which is itself lower than this height.

The space G, at the western part of the town, is a plain accessible on all sides, formed of natural meadows, without trees or any shelter whatever, and which rises by an imperceptible gradation towards the country.

At the south-west is a piece of water B, broad and deep, surrounded by heights and defiles: from this piece of water issues a rivulet, which throws itself into the Mississippi, crossing a defile formed by the two curtains H and I.

The most elevated of these curtains is that of H, on the side of the country.

The side opposite M, to the north of the town, is open and accessible on the whole of its front. The ground is sloping, from the summit of the curtain F to the bank of the river.

Thus, from the west and north side of the piece of water to the bank of the Mississippi, the ground offers no natural impediment to the enemy's penetrating into the town. This space is about a thousand yards.

The roads are easy on all the points surrounding the place, and the only natural obstacle to the movements of the enemy is in the southern part of the town, from the piece of water B to the river.

From this side the heights L and 12 command a part of the curtain, which forms the embankment of the rivulet A.

A bad fort, with four small bastions, narrow and ill-placed, formed by a range of palisadoes to keep up the earth, occupies at present the platform E.

A great detached bastion, No. 2, invested with a wall of freestone twelve feet in height, and two feet and an an half thick, with large embrasures, without ditch or palisadoes, is erected in the northern part of the town, the whole front of which it commands as far as the river.

The face and left flank command also the western part of the town; but left to its own defence, which is null, this display of cannon becomes altogether useless, since the enemy would march directly on its front and right flank, and would carry it sword in hand, before attempting to enter the town.

Their fire then directed on the fort No. 1, would overwhelm it in an instant, and the fort falls of itself.

Thus are these two important points so ill occupied, that they can only be maintained during the time necessary for the enemy to approach the bastion No. 2, and turn the artillery on the fort No. 1.

According to this sketch, different modes of defence present themselves; it remains only to decide on those which are the most speedy and suitable.

## FIRST PLAN.

The platform E being of a proper extent to admit a work susceptible of a good defence in itself, having also the advantage, from its position, of commanding the whole town and a great part of the surrounding country, the whole of the defence might be concentrated on this spot, by occupying at the same time the points L and 12, which command it, without any apprehension of leaving the town open.

The fort marked No. 1, on the papillon, would perfectly answer this end; the part Q of the platform should be occupied by a redoubt in front of the glacis, supported by a good communication, in order to take the reverse on a

point of the slope of the platform, and in the front of the fort. A solid work should be made in L, the defence of which should be connected with that of the principal fort; a battery should be raised at point 12, and these works should be surrounded with an abatis 22 and 25.

The battery 2 should be rased, which could only do harm to this plan of defence, without any possibility of advantage.

The importance of the town of St. Louis, situated almost at the mouth of the Missouri, and which may be regarded as the key of Upper Louisiana, will require, perhaps, sooner or later, the adoption of this plan.

## SECOND PLAN.

The platform E should be occupied by an earthen fort, conformable to the chief inclosure of the fort No. 1, traced on the papillon; the capacity should be diminished, and the half moon and covered way be suppressed. The fort should be surrounded with a large and deep ditch, invested with a small glacis palisadoed and double: the parapet of the work should be bordered according to the profile opposite.

The battery 2 should be put *à barbette*, surrounded by a good ditch, with a small palisadoed glacis; a small

covered way may be afterwards added, and a few *places d'armes*, indispensable to make cross fires. From its neck, a line *à redans* in the earth should be drawn, marked 8, 8, covered with a ditch and palisadoed glacis to the bank of the Mississippi: the houses 21 behind this line may be placed at the instant of the attack, at small expence and speedily, in a state of defence: if they were constructed of stones or brick, they would powerfully support this line.

In the bastion 2, only six-pounders should be placed; so that if it be carried, its artillery could not resist with advantage that of the fort 1, where should be a few pieces of twenty-four, which would soon silence it.

The mounds 6 and 7 should be rased; it would be useless to think of fortifying them.

The works in earth, 3, 4, and 5, should be erected; and the whole of this system should be covered with posts of a general abatis, 20, 20, etc.

On the southern side, across the embankment of the rivulet A, dikes of earth should be formed, 13, 14, 15, 16, and 17, in order to procure an inundation in the whole length of this embankment; these dikes should be supported by the *flèches* 9, 10, 11, and 12, and the summit should be covered with trees, in the form of an abatis, to prevent them from serving as a passage to the enemy. It

must be observed, that the whole of these works should be in earth.

If the time permitted, the line *à redans* 18 should be drawn, such as it is pointed in the plan, like that on the opposite side of the town, marked 8, 8. The houses 21 on this side should also be put in a state of defence, to stop the enemy, in case he should have passed the inundation.

Examination should be made on the places, whether the works 3, 4, and 5, embrace too great an extent of ground; for the more the defence is parcelled out, the more difficult it is to preserve the order and connexion necessary to render it successful; especially where there are neither disciplined troops, nor officers well skilled in military tactics.

On this hypothesis, these three posts, or at least the Nos. 4 and 5, may be suppressed, and an abatis formed, such as is marked 22, joining the great abatis at the point C, and from thence continuing it, as it is marked, to the banks of the Mississippi. This position would be very respectable under the cross fires of the two forts 1 and 2, supported also by the houses 22, 21, which are themselves protected by the forts.

The construction of two or three works might be avoided; and the men they would require might be

advantageously distributed in the other forts. The No. 3, however, seems indispensable, on account of the great interval between the redoubts 1 and 2.

The fort 1 may be furnished with fifteen pieces of twenty-four, twelve, six, and four pounders.

The bastion 2 should be furnished with eight six pounders; two four pounders would be sufficient in the work 3; two in the *flèche* 5, and three in that marked 4. The two pieces of the *flèche* 5 should be drawn back into the redoubt 3, and the three in the work 4 into the fort 1, as soon as the enemy had forced the abatis.

Two four pounders should be placed in the work 10, and two six pounders in the lunette 12.

Thirty-four pieces of cannon would be sufficient to support all these positions, which would require three hundred cannoneers to man them in case of attack.

Twelve hundred infantry would likewise be necessary to defend the whole of these works; by infantry I mean regular troops, militia, and Indians.

	300 cannoneers.
	1200 infantry.
	<hr/>
Total	1500 men.
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This plan of defence has of late been partly put in execution by M. Finiels, a French engineer, who was immediately dispatched by the Spanish minister at Philadelphia, on the report which I made him of the danger to which this place was exposed.

## CHAPTER XVII.

*Description of the River of the Illinois.*

THE river of the Illinois is situated towards the thirty-ninth degree thirty minutes northern latitude, and six leagues above the Missouri, on the eastern side of the Mississippi. This river is about five hundred yards wide at its mouth.

The chain of rocks and high mornes which begins at the mouth of the Kaskaskias, and which runs parallel with the Mississippi, passing behind the Meadow of the Rock, St. Philips, Kaokia, and de Piasas, turns near the mouth of the river of the Illinois, and keeps at greater or less remote distances, on its eastern side, the same direction as this river.

After ascending the river eighteen miles, on the eastern side, we reached a small river, called Macopin,

which signifies in the Indian language White Yam. This river is about twenty yards broad at its mouth, and is navigable nine miles.

In this space, the maple or sugar tree, the ash, and other wood fit for construction, are very common.

At slight distances on each side of the river, are fine natural meadows: the earth on these banks does not break off like those of the Mississippi. We passed several islands, some of which were from nine to twelve miles long and three miles broad; after which the breadth of the river continues to be about four hundred yards, and runs N. N. W.

Thirty-six miles above the Macopin is the village of the Priorias, situated at one mile distance from the left bank, and behind which are several small lakes, that communicate with each other, and are surrounded with natural meadows of great extent. The passage which these lakes have opened to the river is very narrow, and practicable only for small canoes. The high chain, which follows the river, falls back here to a considerable distance.

Twenty-seven miles farther up the river are several small islands, covered with a great quantity of animals; and eighteen miles beyond is another island of some extent, called Pierre à flèches. Near this island mountains not lofty, border the western side of the river; on those

heights the Indians find the stones with which they point their arrows.

The eastern side is bordered by natural meadows to a great extent: the land is very fertile, and watered by a multitude of small rivulets which are never dry. The heights are covered with the tallest ash trees; the banks of the river are high, its waters are limpid, rolling over a bed of sand and white clay.

Eighteen miles farther up is Mine River, called by the Canadians Bad Land (*Mauvaise Terre*). During this space, the aspect of the country continues the same: on the east lie natural meadows, which are sometimes nine, twelve, and fifteen miles broad; on the west is the chain of small hills, that runs parallel with the course of the river.

Mine River is not more than fifty yards wide at its mouth; its current is very rapid, and its banks on each side are low, but rise afterwards gradually. The lands along this river are of a very fine quality, particularly for corn and pasturage.

Twenty-one miles above Mine River is the Sagamond, situated on the western side, at the extremity of the chain of small mornes. This river is about one hundred yards broad, and is navigable one hundred and eighty miles for small canoes; the right side is very low, and the left

bordered during a space of six or nine miles by small mornes.

Twenty miles from the Sagamond is the river Demi Quian, on the same side. This river is fifty yards broad, and is navigable one hundred and twenty miles.

Nine miles above this river is Demi Quian Lake, situated on the western side. This lake, of a circular form, is at least six miles in diameter, and empties itself into the Illinois river by a small channel, which is always four feet deep. The banks are bordered by natural meadows, especially on the western side, where the view is unbounded. This part of the country has little wood; the lands are fine in every direction, and the waters of the river and lake perfectly limpid. The course of the river, proceeding from the lake, is eastward, and the navigation excellent.

Twelve miles above the lake, and on the same side, is the river of Seseme Quian. This river is forty yards broad, is navigable for canoes sixty miles, and flows through a very fertile country.

Nine miles higher, and on the same side, is the river March, thirty yards broad, and navigable nine miles only for small skiffs. The country here begins to rise gradually towards the west.

Nine miles higher, on the eastern side, is the river Michilimackinac, fifty yards broad, and navigable ninety

miles. There are thirty or forty small islands at its mouth, which at a distance have the appearance of a village. On the banks of this river there is excellent timber; the red and white cedar, the pine, the maple, and walnut tree. The land is high on both sides, and the woods are intersected at certain distances by fine natural meadows, covered with grass of the best quality for cattle.

It is worthy of remark, that in the space of one hundred and fifty miles there is not a single river or rivulet on the eastern side, whilst the western side abounds with both.

The river Michilimackinac forms the line of separation of the counties of St. Clair and Knox from the state of the North-West Territory.

Twelve miles above the Michilimackinac is the village of Pioria, called also by the Canadians the Piss; it is inhabited by fifteen Canadian families, who till the land and trade with the Indians. There is an old fort situated at the southern extremity of a considerable lake, called the Illinois Lake, formed by the river, and which is about twenty-one miles long and three miles broad. In this lake there is neither rock, shoal, nor current. The ruins of the block-house that formed the fort are still seen: the platform on which it was built affords a delightful

prospect. On the north the lake opens in its whole extent; on the west vast natural meadows close the horizon, and towards the east of the lake terminates the chain of rocks, which taking its rise behind the Kaskaskias, the Kaokia, etc. follows constantly the same direction as the Illinois River.

### RECAPITULATION OF DISTANCES.

From the mouth of the Mississippi to	Miles.
The river Macopin . . . . .	18
Priorias . . . . .	36
Several small islands . . . . .	27
Island Pierre à flèche . . . . .	18
Mine River . . . . .	18
The Sagamond . . . . .	21
Demi Quian River . . . . .	21
Demi Quian Lake . . . . .	9
Semi Quian River . . . . .	12
March River . . . . .	9
Michilimackinac River . . . . .	9
Piss Village . . . . .	12
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## CHAPTER XVIII.

*Missouri. — General observations. — St. Charles. — Astonishing prospect. — Miserable state of population. — River Gasconnade. — River Osage. — River à la Mine. — Cheraton River. — The Great River. — Prairie du feu. — Cans River. — Little Plate River. — Nidmaha River. — Nichenanbatonais River. — Plate River. — Otoktata nation. — Great Panis nation. — Wolf River. — Little Sioux River. — Maha nation. — Great Sioux River. — St. James River. — Qui-court River. — Poncas nation. — White River. — Observations. — Oconona nation. — Ricaras nation. — Chaguienne River. — Chaguienne nation. — Nations allies of the Chaguiens. — Padou nation. — Baldhead nation. — Probabilities respecting the distance of the Southern Ocean. — Mandanes nation. — Big-bellied nation. — Observations respecting the forests. — Asseniboine nation.*

THE mouth of the Missouri is situated towards the thirty-ninth degree of latitude; its direction is north-west, running east-south-east, and it empties itself into the river Mechacipy, or Mississippi, a word which signifies

in the Indian language Great River, five leagues above St. Lewis of the Illinois.

No one has yet penetrated as far as the spot whence this river takes its source;\* but it is highly probable, from the reports of the indigenous nations, and the structure of this part of the continent, that the Missouri flows from the chain of mountains, called by Mackenzie "Stony Mountains," and by the Indians "Yellow Mountains;" and which are only a prolongation of the Cordelleras. It has also been presumed, that this chain of mountains must run parallel with the coast of the Southern or Pacific Ocean, at the distance of an hundred or an hundred and twenty leagues.†

The banks of this river have been explored the length of more than six hundred leagues, without finding any rapid, fall, or cataract. What it has in common with all other rivers, the banks of which are uninhabited, is, that it is sometimes encumbered with drift-wood; but this inconvenience is seldom perceived but near its mouth.

Its current is often divided by islands, which form several channels; this renders its navigation difficult in dry seasons, from the uncertainty of knowing which is

\* This journey is now undertaken by order of the President of the United States.

† See the chart of the Upper Missouri.

the channel that contains most water. This river is from three quarters of a mile to a mile and an half broad, and when the passages are known, it has sufficient depth for the largest boats at all seasons.

The river Plate disturbs the waters of the Missouri, and gives them a considerable rapidity, which has, however, been much exaggerated. Its course is gentle above this river, and its waters limpid ; and the further you ascend, the slower is its current.

One of the great obstacles to navigation on this river is the direction of the winds, which blow nearly eleven months in the year from the north-west; and often with such violence, that it is found necessary to unload the boats, in order to avoid their being sunk, not being able to find a safe shelter. But it is chiefly in dry seasons that this danger is imminent; for when the waters are high, it is easy to secure the boats or barges, by means of the trees, which almost every where line the banks of this river.

The Missouri, from its mouth to the river Plate, flows through a country extremely diversified : the lands on the left side, towards the north, are of the best quality ; fine plains sufficiently undulated to carry off the water, intersected with woods of a lofty kind, and which bears marks of the greatest fertility: the right side, on the contrary,

is broken by barren heights, and at equal distances by small vallies, which for the most part are covered with sand and gravel.

The river Plate in the whole of its course runs through a country of this nature, the chalky soil of which gives its waters a whitish color.

The river Qui-court and the White River (la Rivière Blanche) traverse countries of similar extent; neither trees nor herb, except wild thyme, are to be seen; and of animals, only the rabbit and the small meadow dog.

Beyond the Plate, as far as the base of the Yellow Mountains, the Missouri flows between two chains, which run parallel with its course, and which are a continuation of steep rocks, covered with fine and short grass. In some places, however, these chains are broken, and the intervals are formed of meadows of large extent, which are frequented by numerous droves of buffaloes and roebucks.

Beyond these chains are vast meadows, which stretch away to the west, without any interruption, towards the Yellow Mountains, and which are intersected only by the rivers, that throw themselves into the Missouri, or interspersed with small clumps of wood of the poplar and willow kind, or white wood of similar growth.

About two leagues from the mouth of the Missouri,

and on the left side, is situated the town of St. Charles, which is the last of the settlements belonging to the Whites to the north-west of the continent; it is also at this point that the lands on that side begin to rise, the country which lies between St. Charles and the Mississippi being low, covered with rushes, and swampy. A mile beyond this town are three beautiful eminences, detached from each other, called the Breasts (*les Mamelles*); from which we beheld a most astonishing prospect.

To the east the view is interrupted by cliffs which are not less than three or four hundred feet high, and bound in this part the left side of the Mississippi. In turning towards the north, the river of the Illinois, flowing from the lakes, runs over a bed of pebbles, and, after a thousand windings, and freeing a number of falls and rapids, joins the Mississippi. Certain portions of this river, desried at intervals, run in nearly the same direction, overhung with dark forests; a gentle slope renders its current slow and easy; and its fertile branches are decorated by cypress trees and lianas of graceful and infinitely varied elegance. In some places, marshy swamps covered with bamboos, in which the most venomous reptiles fix their abode, form a contrast of all that nature can present of beauty and deformity. Towards the north-west the scene changes altogether: here the rapid

Missouri, with tumultuous noise, rolls on its muddy waters; its steep banks, undermined continually by the violence of the current, sometimes fill its bed with the wrecks of trees, and accumulate obstacles that are almost insurmountable. Towards the south, the Mississippi again presents itself, its waters discolored by those of the Missouri, flowing through the fine country of the Illinois, and stretching along till lost in the horizon, after having its course divided and broken by a multitude of charming islands. This view is so highly decorated, that it would seem as if art had lavished all its resources to embellish this part of the continent; and yet these beauties are the workmanship only of nature. It were unjust to assert that these descriptions are the exaggerated tales of travellers; imagination, taken in this sense, does not deserve this reproach, relatively to the beauties of nature; imagination fails when with its most vivid coloring it attempts to vie with nature, and remains far below its model, even in its most eloquent descriptions. What an immense distance between the ideas which are excited in us by the view of the finest paintings, and the spectacle of those magnificent forests, those immense natural meadows, those majestic floods, and stupendous cataracts which astonish us in the new world! The imagination of man can only surpass the works of his own hands, can

only embellish the objects of art; but when we contemplate the sublimity of nature, human conception sinks far below the reality, and the impression made on the mind by such scenery may be felt, but can never adequately be described.

St. Charles contains about an hundred or an hundred and twenty ill-constructed houses: the inhabitants do not till the ground, though it be extremely fertile; their ordinary occupations are hunting and trading with the Indians; a few hire themselves out as rowers; and it would be difficult to find a collection of individuals more ignorant, stupid, ugly, and miserable. Such are the sad effects of extreme poverty, with its train of cares and evils, that it destroys not only the beauty of the person but even the intellectual powers, and blunts all those feelings of delicacy and sensibility which belong to a state of ease, and the advantages of a good education.

Twenty-eight leagues from St. Charles, towards the north, is a river, called Gasconnade, which is about thirty fathoms wide at its mouth: this river is full of rapids, and navigable only in high waters for small boats, during the space of fifty leagues.

Ten leagues higher, and on the same side, the river of the Great Osages empties itself, after flowing sixty leagues, as far as the village of the Great Osages, through

a country extremely fertile, but low and swampy on both sides.\* Its navigation is safe at all seasons, as far as the village, for boats and barges.†

Twenty leagues higher, and on the same side, the Mine River empties itself. The country it flows through is barren; it is a continuation of high meadows, on a gravelly soil: the navigation of the river is unknown.

At the distance of five leagues, and on the northern side, is the river Cheraton, navigable only for small hunting boats;§ the meadows through which it flows are high, but fertile.

Nine miles higher, and on the same side, flows the Great River, which is navigable eighty leagues for large barks; it communicates towards its sources by a small

\* Among the papers which were taken from us by the governor of Louisiana, composing five chapters relative to the Missouri, was a particular description of the river of the Great Osages, from its mouth to Fort Carondelet, as well as that of the river of the Arkansas. Baron Carondelet, indeed, with a politeness somewhat dilatory, sent them back to me six months after, by the American brig the Betsy, Captain Peter David; but the bearer having thrown them into the sea, they were lost to me as well as to the public.—See Proces-verbal, Appendix, No. 2.

† What follows, after the river of the Osages, are accounts given to us by different travellers, who traded to the Upper Missouri.

§ A kind of canoe, which carries only two men.

carrying place of ten or twelve miles, with the river Dumoins, which falls into the Mississippi.

Twenty-six leagues beyond the Great River, on the southern side, is a vast plain, called Fire Meadow (Prairie du Feu).

Ten leagues higher than Fire Meadow is the mouth of the river des Cans. This river is navigable an hundred leagues for barks and barges of every kind; it runs through very fertile lands, flat, well wooded, and intersected by rich meadows; but the country, such as we have already described, does not extend farther than one or two leagues from the banks. In ascending this river fifty leagues, we find a fortified point, on which is situated the great village of the Cans. The branch which runs to the West is called the River of White Water; on that of the south-west the Indian nation called Republican is established.

Five leagues further up the Missouri, and beyond the mouth of the Cans, is the little river Plate, which is navigable at no season of the year, and is dry during the summer.

Fifty leagues beyond the little river Plate, on the southern side, is the river of the Great Nidmaha, navigable only for hunting boats; it flows through high meadows and lands of a bad quality.

Ten leagues higher, on the same side, is the Little Nidmaha, which is not navigable for any boat, and runs across a country that is high and barren.

Fifteen leagues from the northern side of the Little Nidmaha is the river Nichenanbatonais, navigable an hundred leagues for hunting boats; these lands are bare, and of the same quality as the preceding.

Fifteen leagues higher is the mouth of the river Plate, situated on the western side: this river is as large as the Missouri, and runs with such rapidity, that oars and poles are insufficient to resist the current; the only mode of going up is by towing. But to use the towing-line, the waters must be low; and then this expedient is dangerous, on account of the quicksands, against which boats have sometimes struck, and disappeared with the whole crew. These sands may be distinguished, as we have already observed, at a considerable distance, by their reflecting surface, which is occasioned by the humidity of the soil, and the action of the sun.

This river is shallow, and its bed and sides full of quicksands; its waters are white and of a chalky color; the lands through which it flows are also chalky; its banks are bordered by small bare slopes, and the aspect of the country is in general dry and barren.

At the confluence of the Plate River is situated the

village of the Otoktata nation, which consists of three hundred warriors: this nation is stationary, and is composed of good hunters.

Twelve or thirteen leagues above the village Otoktata, is the village of the Great Panis (Grand Panis), situated on the same side: this nation is settled, and is composed of seven or eight hundred warriors, who are neither brave nor fond of hunting.

Five leagues from the village of the Great Panis, and on the opposite side, is Wolf River (la Rivière des Loups), which flows across low meadows and lands extremely fertile. At its mouth is the nation of the Panimahas, which counts six hundred warriors, who are extremely brave, but bad hunters.

Thirty leagues beyond the Plate River, on the northern side of the Missouri, is the little river of the Sioux, which is navigable only for small hunting canoes.

Twenty leagues above this last river, and on the southern side, is the nation of the Mahas; their village, or their huts, are built in a fine plain, at two leagues distance from the Missouri. This nation is sedentary, and cultivates Indian corn and gourds. In the month of June, these Indians usually set out in considerable bodies to hunt the buffalo, and return in the month of August, to gather in their harvest. At the approach of

autumn, and towards the month of October, they again leave their habitations, but in small bands, at the head of which is always a chief, to hunt the beaver, the otter, the roebuck, and other fur animals; they return towards the end of January. This nation is supposed to consist of eleven or twelve hundred warriors.

Six leagues above the nation of the Mahas, and on the north-east side, the waters of the great river of the Sioux empty themselves. It is on this river that the people of the Sioux, who inhabit the borders of the river of the Moins and St. Peter, come at different seasons of the year to hunt wild bullocks and other animals; having communication with this river by a carrying place of twelve miles.

Forty leagues above this last river that of St. James discharges itself, navigable, according to the report of the Indians, during sixty leagues for great canoes: it flows along very fertile meadows, that are covered with animals. This river abounds particularly in beavers, and receives, a little below its sources, several small rivers, of which one is called Red Stone River (*la Rivière aux Pierres Rouges*), from a quarry of stones of that color which is found on its banks, and which the Indians employ in making pipes and calumets, that are highly esteemed, since none resembling them are found in any part of the

Missouri. This quarry lies four or five feet below the vegetable earth.

At the distance of twenty leagues, on the western side of the Missouri, is the river Qui-court, which takes its source to the west-south-west, and very far above its mouth. According to the Indians, this is, of all the rivers which are frequented, the most abundant in beavers and otters. Its course is so rapid, and broken by so many falls, that it is impossible to navigate it either in canoes or skiffs.

Two leagues above its mouth is situated the village of the Poncas. Their huts are built on a small eminence about a league from the Missouri. Around this hill are fine meadows, watered by a small river which is extremely pure and limpid, and which gives to this site an agreeable aspect.

Although these Indians have their fixed dwelling in this place, they are not sedentary, and do not cultivate the ground, but live by hunting wild bullocks, which abound in these vallies; they kill also great numbers of otters, beavers, and roebucks.

Thirty leagues above the river Qui-court, and on the same side, the White River (*la Rivière Blanche*) empties itself: the waters are as white as lime water, running

through a country the soil of which is pure chalk. This river is not large, or navigable for any kind of vessels.

Ten leagues higher, the Missouri makes a great bend towards the west, forming a circuit of ten or fifteen leagues, at the end of which it resumes its ordinary direction towards the north-west. The neck of the peninsula, formed by this circuit, is about four or five miles; and as this space is only low land, without mountains or rocks, it will be easy at some future period to make a canal, which would shorten this navigation twelve or fourteen leagues.

Twelve leagues above this bend, and at the place where it finishes towards the west, is a small river, called by the hunters the Little Missouri, and by the Indians Still Water. It is navigable for canoes only in the spring, when the snows melt, or after great falls of rain.

A horde of Sioux, called Oconona, formerly allies of the Ricaras, dwelt habitually on this river; but they have lately been driven away, and it is not known in what latitude they now live.

The nation of the Aricaras were situated ten leagues higher on the western side of the Missouri; they were divided into two villages at half a league distance from each other, and which they have lately forsaken to live near the Mandanes. The Aricaras were formerly very

numerous, consisting of thirty-two villages, now destroyed in part by the Sioux. The small-pox has also made such ravages in this nation, that they are reduced to five hundred warriors at most.

Two leagues above the second village of the Aricaras, on the same side, the river Chaguienne empties itself. This river is rather large at its mouth, but shallow; so that the navigation is made with difficulty, and only in canoes. It rises in the west, in mountains which are very steep and rocky; its banks are covered with fine timber, and, according to the Indians, it is much frequented by beavers.

About forty leagues from its mouth, it divides itself into two branches; the western branch is called Cherry-branch River (*la Rivière aux Cerises à Grappe*). The Chaguienne nation is settled a little above the fork, and cultivate Indian corn and tobacco: the Chaguiennes are divided into three hordes; the first, which is the most considerable, bears the name of Chaguienne; the second that of Vouisy; and the third that of Chouta: they hunt the wild bullock the whole length of this river, from its source to its mouth; traverse even several chains of steep mountains, that separate, as they assert, in several places, this vast country; in the midst of which are a great quantity of lakes and marshes, that, according to

their report, form the place of meeting of the different tribes of beavers. These Indians recount on this subject the most absurd stories, and which are highly characteristic of their ignorance and superstition; we shall cite one of these tales, as an instance of the credulity of this simple people.

One of these lakes, they assert, is much larger than the rest, and which no animal dares approach; there is always a great quantity of wild bullocks in its environs, but every human being dreads its neighbourhood. In the midst of this lake is an habitation of beavers of an extraordinary size and height, surrounded by an infinite number of lesser ones. Every night, even when the weather is calm, a noise, like that of the sea agitated by the wind, is heard on this lake.

Two young warriors, excited by curiosity, once concealed themselves four days and four nights, in order to discover what could occasion this horrible noise, and also to see the spirit king of the beavers, which dwells in this great lodge, as they had been assured by their old men. They saw nothing during three days, but heard in the night a sullen noise in the lake, the waters of which rose high on the bank, and retreated in the morning. The fourth day, towards the evening, they saw, on the summit of this great lodge, a beaver

of an enormous size, whose hair was quite white, and a number of other beavers of less size seated around him. At a certain cry, the whole morass was in motion, and the waters swelled with a noise so dreadful, that the two affrighted Indians fled back to their village, and related what they had seen.

From this ridiculous story, we may draw an inference not totally destitute of probability: it is very possible that there may exist in this part a bay of sufficient extent and depth to reach the base of these mountains; this would explain the noise and motion made by the waters, and which so much astonished and alarmed the two Indians. Chesapeak bay furnishes us with an example.

Independently of these different tribes, this country is overrun by several other wandering nations, such as the Cayovuas, the Tocaninaubiches, the Pitapahats, the Tokiwuakos, friends and allies of the Chaguiennes, but each having a different language? These last are excellent hunters; but as they have yet no communication with the whites, they change their skins and furs for goods which are furnished them by the Sioux, who have been a long while in the dependence of the English.

The nation of the Paduas inhabiting the banks of the river Plate, are distant only ten days march from the

Missouri, which may be computed at sixty or eighty common leagues.

The Hulitanes, or Baldheads, a wandering race, occupy the whole of the great extent from the river Plate to the source of that of the Arkansas, and stretch along the great mountains which separate New Mexico from this continent.

When we interrogate these different nations, and the traders who frequent them, respecting the nature of the country on the other side of these rocky heights, they all agree in their information, that beyond these great mountains, which have two, three, and four chains, and after having travelled several days (six or seven), they reach the banks of a great river, large, deep, and well wooded, the waters of which run, to use their own expressions, to the "setting of the winter." In following the banks of this river for some days, they find several Indian villages of a nation unknown, who make use of utensils of their own invention; their huts are composed of junks and long straw; the wild bullock, the stag, and other large animals, which serve for food and clothing to other Indian nations, are altogether unknown in these countries; their garments and shoes are made of the skins of beavers, otters, foxes, wolves, and hares. Like the Indians they use the bow and arrow pointed

with bones and flints; they cultivate Indian corn, the grain of which, they say, was furnished them by a great Indian nation, who dwell lower down the river, and who sow and reap a vast quantity. The women of this nation wear ear-rings and necklaces of small shells of different forms, strung on slender thongs of leather, and which they procure at the entrance of this great river, where there is a large lake, of which the opposite side is not to be seen, and the water of which rises and falls considerably at certain times both day and night. The nations who reside on the borders of this great lake tie large pieces of meat to the end of a long cord, which they throw into the water when it is high, and drawing it out when the water falls away, often find a great quantity of these little shells sticking to the meat, which they take off, make holes in them, and tie them to their neck and ears. A knife, with the name of Cook marked on it, was found in the hands of one of the chiefs, and sent to the Governor of Louisiana.

Above the mouth of the river of the Chaguiennes, the Missouri turns to the north-east, runs for the space of four or five leagues, and from thence turns to the north-west, as far as the Mandanes. About fifty leagues above the villages of the Aricaras, on the eastern side, is a river

frequented by the Sioux, called Titons. There are several small rivers on the western side, none of which are navigable. The distance from the river of the Chaguiennes to the Mandanes nations is computed at about an hundred leagues. These people were formerly very numerous, but were attacked several times by the nations lying to the north of the Missouri, and were depopulated also by the small-pox. The Mandanes reckon no more than three hundred men capable of bearing arms.

The Big Bellies (Gros Ventres), called by the Indians "the Long-Haired Nation," are more numerous, and can set on foot eight hundred warriors. They are divided into two villages, the distance of half a league from each other, situated on the banks of the Missouri, to the left, in ascending about two leagues above the Mandanes. These last are divided into three villages, the greatest of which is built in a fine country, on the western part of this river; and the two others, which are smaller, on the eastern side, and opposite to each other.

These nations are all settled, and never leave their villages but by brigades, either for war or the hunting of wild bullocks, which are numerous in this part of the country.

Near the villages of the Mandanes and Bigbellied Indians, the forests which border the Missouri are much thicker, the wood larger and more lofty than that on the lower part of this river, that is, from the Great River Plate.

The Asseniboines, a wandering tribe, situated to the north of the Missouri, with whom the English merchants of Canada and Hudson's Bay carry on the fur trade, frequent the Mandanes and the Bigbellied Indians, of whom they purchase horses, Indian corn, and tobacco, in exchange for muskets, iron pots, knives, etc.

A few years since, the English merchants built small forts in several places on a river, called the Red River, which falls into that of the Asseniboines. The sources of this last river begin near the Missouri, towards the Mandanes country. They send their agents by land, either with horses in the autumn or spring, or with great dogs in the winter, which run with light and slender traineaux on the snow, and traffic for bullocks' hides, wolf and fox skins, in exchange for powder, knives, glass beads, and vermillion. The passage from the Missouri to this river is reckoned by travellers who have made it several times, at a hundred of our common leagues.

At fifty leagues above the villages of the Bigbellied

Indians, to the west of the Missouri, a great river discharges itself, called Yellow Rock River by the Indians (*Rivière aux Roches Jaunes*), and by the French, Crow River (*Rivière des Corbeaux*). This great river flows from the rocky mountains on the western side: its banks are well furnished with wood; such as pines, firs, cedars, the beech tree, and several other kinds. Along its banks are likewise found droves of bullocks and other wild beasts. A number of small rivers which flow into it, abound with an almost incredible multitude of beavers. Notwithstanding the concourse of these animals found on this great river, its waters are as pure as chrystal. Its current is not so rapid as that of the Missouri. The Crow nation, a numerous tribe, dwell on its banks, and higher up, towards its source, are a number of other Indian nations as yet unknown. Several Indians assured me that this river is very large and deep to a great distance above its mouth. A Canadian traveller, named Menard, who has resided more than sixteen years among the Mandanes, and who has been several times in quality of calumet to the Crow nation, in company with the Bigbellied Indians, who are his allies, assured us, that this river was navigable in all seasons with great pirogues, for more than an hundred and fifty leagues, and perhaps

two hundred from its mouth. He told us, that it required from fifteen to twenty days march of an Indian going to war,\* to travel from the Mandanes to this nation.

A fort built at the entrance of this fine river would be extremely advantageous for opening a considerable commerce, not only with the neighbouring nations, but with those also who inhabit the western part of the Missouri above this river; such as the Chionitanons, and the nation of the Serpent, who dwell among the rocky mountains, respecting which we have as yet but little information.

A great part of the Asseniboine nation, which over-spreads the country north of the Missouri above the Mandanes, would have much more facility, in opening a trade for its skins with this fort, by following the lake Placoty, than by taking them to the forts of the Red River, which belong to the English.

The Sioux, called also Titons, who are divided into four great wandering tribes, frequent the whole of the eastern part of the Missouri, from the White River, thirty leagues above the river Qui-court, as far as the river of the Titons. They traverse, likewise, the western part of this

\* There is a difference between the march of Indians going to war and returning; in the first case they march much more slowly than in the second.

river, to hunt the wild bullocks and beavers, which are generally in greater abundance there than in any other part.

The Sioux are accustomed to frequent the Chaguiennes and the Ricaras, and sometimes the Mandanes; from the two first nations, they purchase horses, beaver skins, and dresses suitable to their customs, and deal with the latter for Indian corn and tobacco.

The Sioux nations are those who most frequently hunt beavers, and other animals, which furnish good furs. These hunters overrun and explore rivers and lakes without fear or apprehension, and carry off every spring a great quantity of furs from the territory belonging to His Catholic Majesty, which they exchange for goods with the other nations of the Sioux, dwelling on the rivers St. Peter and Moins, and which are frequented by the English dealers in Canada.

It would be easy to establish warehouses on the Missouri, to supply the wants of those Indians; and thus deprive the English of this branch of industry, of which they now have possession.\*

The Sioux quit the banks of the Missouri in the beginning of the month of April, and return in the course of

\* See the chapter on the fur trade.

the months of July and August, where they pursue their occupations of hunting till the spring.

The months of April, May, and June, are the only seasons in which the places frequented by them may be passed with safety; because they either kill or make prisoners of every stranger they can lay hold of.

The whole of the Indian tribes lately known, and of whom we have spoken, that inhabit the western part of the Upper Missouri, except the Sioux nations, are the most mild, humane, and hospitable people on earth; but it must be observed, that none of the nations inhabiting the Missouri are cannibals, while those who live eastward of the Mississippi are almost all addicted to this practice. They have a great respect and veneration for all white men, whom they confound indifferently under this denomination; being incapable of making any distinction between the Spaniards, French, and English. It is important to prevent the latter from obtaining settlements among these people.

When I undertook this expedition, I had determined not to enter into any details respecting the natives, and still less to listen to those marvellous stories which travellers record in their descriptions of distant countries. I am induced, however, to break this resolution, by relating

two facts, which appeared to me so very remarkable, that I thought I might allow myself this exception.

During my abode in the Illinois, I had an opportunity of forming an acquaintance with a young physician, of the name of Rosse, interesting as well for his talents as for the courtesy of his manners. What had most struck him, he often told me, in the different excursions which he had made into the inland countries, was the character of the Indians, who are every where the same with respect to their patience, their indolence, and their insensibility both physical and moral.\* He did not think with me, that this indifference of character proceeded from their education, as I had often endeavoured to persuade him, but from the nature of their blood, which was much thicker, and circulated more slowly than in the whites. To prove what he advanced, he engaged me to repeat the same experiments which he had already made; to compare the pulsation of an Indian with that of a white; taking

\* An Indian is sometimes seen seated at the foot of a tree, employed a whole day in rubbing two stones, one against the other, and he will begin again the next morning, and continue his task till he has given them the polish he desires. This operation lasts sometimes a month. Every one knows with what indifference Indians support what we civilised nations call horrible pains.

care that the stature, age, and strength of both should be as near as possible the same. This idea seemed so ingenious, that I resolved to put it in execution without delay.

I knew that several bodies of Indians, newly come from the Upper Missouri to purchase articles of traffic for the hunting season of winter, at St. Lewis, had settled near St. Charles. These Indians, perfect children of nature, appeared to me preferable for my experiment to the Kaskaskias or Kiokias, inhabitants of the Illinois, already corrupted by their intercourse with the Whites. For the farther we penetrate into the woods and deserts, the more humane and hospitable we find the Indian; the more distant he is from the Whites, the less is he infected with the vices of society. I went, accompanied by Adjutant Warin, an interpreter, and two of my suite, among the Indians; and by means of a few customary presents, induced a Mandane and a chief of the Great Osages to submit to the experiment I proposed to make. The Mandane was about five feet three inches (French feet), and exactly of the same height and size as one of my suite, who was an American, and born at Pittsburgh. The Osage was five feet ten inches and an half, which was my height; he was somewhat less robust, but of the same age, forty-

five years. Three trials, repeated at the interval of half an hour, and by a stop watch, gave the following results :

The American, 69 pulsations in a minute.

The Mandane, 60 pulsations.

Difference.....9.

The Osage.....62 pulsations.

Myself.....75 pulsations.

Difference.....13.

I repeated the experiment with Adjutant Warin and the Osage, as the Adjutant was nearly of the same stature as myself, but more phlegmatic; the difference was only ten pulsations, that is, Warin 72, the Indian 62.

During the course of my expedition, I had an opportunity of repeating this experiment,\* at Cape Girardot, with two Indians of Upper Canada, a Loup and a Chavanon, and also among the Arkansas. The result of these different trials was, that I found the nearest approach

\* I am sorry that I had not thought of trying this experiment on children; but I intend to repair this omission, as well as many others, if I again undertake this expedition, which I have much the wish to accomplish.

between an Indian and a White to be nine pulsations, and the most remote sixteen.\*

This fact, no doubt, is fitted to excite reflection in persons of observation; but that which I am about to mention, is no less worthy of notice.

In the number of different nations which I found encamped near St. Charles, one in particular drew my attention, from the distinctive mark which ornamented both sexes; the men had great rattlesnakes twined around their necks, and the women also around their arms; they played with these reptiles as others would amuse themselves with a necklace or bracelet. My interpreter, to whom I expressed my astonishment at this singular custom, informed me, that these Indians were of the nation of the Serpent, dwelling near the Yellow Mountains, on the right side of the Missouri; that they bore the name of the reptile, which they had adopted for their *manitou*; as others assumed that of the fox, the wolf, and the hawk. After this explanation, nothing remained but to discover how they had succeeded in rendering these

\* I must observe that I had the precaution to put in contrast with these Indians, French, Americans, and Spaniards, without finding any sensible difference.

animals so familiar, and depriving them of their destructive qualities. I thought at first that they had had the precaution of taking out the two incisive teeth, through which the poison distils into the wound which they make by their bite; but I was convinced of the contrary when I was informed of the manner in which these animals were reared, the details of which I obtained from the chiefs, but not without much difficulty, and after many messages, conferences, and, above all, considerable presents.

He told me, that when they were desirous of taming one of these reptiles, they caught it very young, and gained its attachment by the smell, which takes place with many other animals; but that to destroy the venom of its bite, they took care to confine it two or three months, during which time it was fed either with flower of maize, or the juice of very mild plants; and that substituting such aliments to those which nature points out to these animals in the forests, such as vegetables and disgusting insects, it distilled no poison, and its bite became then as harmless as that of the eel.

I was convinced of the truth of what he related by my own personal observation; for by whatever means these animals are thus rendered innoxious, it is certain that they still retain their teeth, and though excited by anger, their bite produced no bad effect.

What a precious discovery were that of a regimen, which should have the faculty of rendering innocent whatever was most hurtful and destructive! and what obligations would mankind owe to the Indians who should transmit to us so precious a secret! But let us not indulge the illusion; the sovereign specific which should have the power of neutralising the most subtle poison, would fail when applied as a remedy for the passions of men.

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# STATE

OF THE

## ANCIENT INDIAN NATIONS,

WITH

### THE NUMBER OF THEIR WARRIORS.



NATIONS.	WARR.	RESIDENCE.
Delaware . . . .	600	Between the Ohio and Lake Erie.
Wayondotts . . . .	300	Near the river Sandusky.
Mohickons . . . .		
Cognawagas . . . .		
Portion of the Chawanons	300	Sioto and Muskingum.
Twightwees . . . .	250	On the Miami River, and near fort Miami.
Portion of the Kickapoos	1000	On the Wabash, or adjacent branches.
Piankas . . . . .		
Musquitons . . . . .		
Ouiatanos . . . . .		
	2450	

NATIONS.	WARR.	RESIDENCE.
<i>Brought over . . .</i>	2450	
Kaskaskias . . . . .	300	Near the Illinois, on the American side.
Piorias . . . . .		
Mitchigamas. . . . .		
Wigondotts . . . . .	250	Detroit.
Portions of the Ottawas	400	The same.
Putawatimes . . . . .	150	The same.
Portion of the Chepawas	200	Near Lake Huron.
Portion of the Ottawas		
Portion of the Kickapoos	400	At the entrance of Lake Superior, and near St. Mary.
Portion of the Chepawas	555	Stinking Bay, near Lake Michigan.
Mynomanies . . . . .		
Sacks . . . . .		
Portion of the Putawatimes	200	Near St. Joseph.
Portion of the Ottawas	150	Near St. Joseph.
Portion of the Kickapoos	4000	On Lake Michigan, and between the Mississippi.
Miscotins . . . . .		
Outagomies . . . . .		
Ottamok . . . . .		
Mascou . . . . .		
Musquakeys. . . . .		
	9055	

NATIONS.	WARR.	RESIDENCE.
<i>Brought forward.</i>	9055	
Portion of the Ottawas	200	Near Lake Michigan, and within twenty-one miles from Lake Michilimackinac.
Portion of the Chipawas	1000	The Islands on Lake Superior.
Portion of the Chawanons*	1100	On the West of the Mississippi, and thirty leagues from Cape Girardot.
The Loups . . . .	1500	The same.
The Cadeaux† . . .	200	. . . . .
The Arkansas§ . . .	200	West of the Mississippi, on the river of the Arkansas.
	13255	

\* No distinction must be made between the Chawanons and the Loups, who are always allied with each other; both are in general devoted to France.

† A very brave nation, and friendly to the French.

§ The Arkansas are the best warriors that inhabit the banks of the Mississippi.

NATIONS.	WARR.	RESIDENCE.
<i>Brought over...</i>	13255	
The Chikasaws* . . .	8000	On the river Yazoo.
The Chactaws† . . .		Between the river Yazoo and the Mobile.
The Creeks§ . . . .	9000	Florida, on the river Mobile.
The Cherokees . . . .		
	30255	

There is a great number of nations dwelling on the west of the Mississippi, between the thirtieth and thirty-fifth degrees of northern latitude; but they are cowardly and degenerated.

\* The Chickasaws also are very brave, but perfidious; no dependance is to be placed in their treaties.

† The Chactaws are in general bad warriors, devoted equally to the Spaniards and Americans.


§ The Creeks and Cherokees are entirely devoted to Spain, and are very good warriors.

# STATE

OF

## THE INDIAN NATIONS

WHO DWELL TO THE WEST AND NORTH-WEST OF THE  
MISSISSIPPI, LATELY DISCOVERED.



NATIONS.	NUMB.	RIVERS NEAR WHICH THEY RESIDE, WITH THEIR LATITUDES.
Castor . . . .	600	The sources of the Sahaskawan, and at the foot of the Yellow Mountains, in the 54th degree of latitude.
Black-Foot . . .	1500	The same; near lat. 52.
Sacué . . . .	400	Sources of the Daim, and at the foot of the Yellow Mountains; lat. 50.
Wandering part of the Asseniboine	500	Southern branch of the Sahaskawan; lat. 47, long. 115.
Great Nation . . . . .		Between the Daim River and the lake Placoté.
Great-Foot . . . . .	1000	North-western branch of the Missouri at the foot of the Yellow Mountains, lat. 50.
	4000	

NATIONS.	NUMB.	RIVERS NEAR WHICH THEY RESIDE, WITH THEIR LATITUDES.
<i>Brought over .</i>	4000	
Asseniboine, settled	1000	Upper part of the Asseniboine River ; lat. 52, long. 115.
The Christinaux .	500	South of the Asseniboine, near the Red River; lat. 47, long. 110.
Sauteux Nation . .	1000	The whole course of the Red River ; between the 46th and 47th degrees of north latitude, and the 100th and 106th of west longitude.
Grand division of the Sioux . . . .	1000	The whole of the river St. Peter, and upon the river St. Lewis.
Lesser division of the Sioux.	. . . .	On the Crow or Yellow Rock River.
Crow-Quill . . . .	. . . .	Crow River, and the bottom of the Yellow Mountains.
Red-Bead . . . . .	. . . .	The same.
Original . . . . .	. . . .	At the fork of the Missouri.
Bigbellied . . . . .	500	Fifty leagues above Titon River ; lat. 53, long. 115.
Mandane . . . . .	1000	On the banks of the Missouri, ten leagues above the Bigbellied nation.
	9000	

NATIONS.	NUMB.	RIVERS NEAR WHICH THEY RESIDE, WITH THEIR LATITUDES.
<i>Brought forward</i>	9000	
Pitapahata . . . . .		Northern bank of the Cherry-branch River.
Tokiwako . . . . .		Southern bank of the Cherry-branch River.
Kayoha . . . . .		The same.
Chaguiennes . . . . .		Confluence of the above river.
Tokaninambich . . . . .		South-western branch of the Chaguienne River.
Arricaras . . . . .	500	Western bank of the Missouri, and the mouth of the Chaguienne River.
Richaare . . . . .		Sources of the Little Missouri.
Blue-Bead nation . . . . .		Southern bank of the Little Missouri.
Poncas . . . . .		Western bank of the Missouri, and the mouth of the river Qui-court.
Mahas . . . . .	1100	Western bank of the Missouri, opposite the Great Sioux river.
Panimaha . . . . .	600	Plate River to the confluence of Wolf River.
Panis . . . . .	800	Southern bank of Plate River, and opposite the mouth of Wolf River.
	12000	

NATIONS.	NUMB.	RIVERS NEAR WHICH THEY RESIDE, WITH THEIR LATITUDES.
<i>Brought over .</i>	12000	
Otoktata . . . . .	800	Mouth of Plate River, and upon the western bank of the Missouri.
Padou . . . . .	. . .	Banks of the south-western branch of of Plate River.
Cans . . . . .	. . .	On the river Cans, where it divides, 60 leagues from its mouth.
Republican nation	. . .	South-western branch of the river Cans, near its source:
Great Osages. . . .	9000	Near the sources of the Great Osages, and of the Lead-mine River.
TheSerpentand Chi-		
ouitanon nations	2000	Westward of the Yellow Mountains.
Maskego . . . . .	. . .	Eastward of Lake Winipeg; lat. 63, long. 104, W.
Bungi . . . . .	. . .	Northward of York River; lat. 53, long. 97, W.
Chipiwiian . . . . .	800	Latitude 57; longitude 110.
	24600	

# SURVEY.

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## CHAPTER XIX.

*Continuation of the description of the Mississippi, from the Ohio to the White River.—Embarrassing situation.—Justification of the vice-governor of Upper Louisiana.—Judge St. Clair.—Rencontre with two suspected Indians.—Superstition of forest men.—Important advice on the expedition of Canada.—Iron mine.—Application of the observations of M. de St. Pierre.—Dew.—New Madrid.—Its bad situation.—Fort.—Further observations respecting the expedition of Canada.—Population.—Margot Cliffs.—Bad position.—Fort.—Advantage of being master of the stream.—The place best fitted for the erection of the fort.—Attack on Adjutant Warin.—Reflections on this subject.*

ON my return to St. Lewis from the Illinois, I learned by letters from New Orleans, that M. de Jaudenès, Minister of His Catholic Majesty to the United States, notwithstanding the passports and letters of recommendation

which he had delivered to me, had written to the Baron de Carondelet, governor-general of Louisiana, to engage him to arrest me ; in consequence of which, the latter had publicly mentioned, that he had given orders to apprehend me. Letters, also, from another quarter, had reached me from Philadelphia a few days before, which informed me that the Secretary of State Pickering had likewise sent orders to the same effect, and that Indians had been dispatched from Canada to assassinate me. These different reports threw me into a great embarrassment, with respect to the resolution I had to take. I could not without indiscretion ask permission from M. Zenon Trudau, commander of the Illinois, to continue my researches in Upper Louisiana ; I might have injured him by such a request, and should thus have been deficient in gratitude towards a man who had treated me with singular politeness and attention. I had determined, therefore, to return by the river of the Illinois, to cross the lakes Michigan, Huron, St. Clair, and Erie, and descend the Mohawk and the Northern River to New York ; but having calculated with my Canadians the time necessary to make this tour, we found that the season was already too far advanced, it being the month of September, and that I should be forced to winter in the lakes, either at Michilimackinac or at Detroit. By fol-

lowing this route, I might not only fall into the hands of the English, but Mr. Mackintosh, also, a trader, who had just come from Detroit, informed me, that I should certainly be arrested at the American posts, since my expedition, having already made a considerable noise, might be interpreted in different manners. Thus in both cases I had to run the risk of losing not only the fruit of my labors, but also my liberty. To return by the same road I had taken, appeared to me weak and dishonorable, and which would not preserve me from any of the dangers with which I was menaced. After maturely reflecting on every circumstance, I determined to follow my first plan, and to proceed at all events on my journey, as I had at first purposed; that is, to go down the river, and examine the various streams that flow into it from the West, as far as should be in my power, without tormenting myself about the dangers or persecutions which attended me in the Spanish possessions, or heeding the frigates or English privateers which were cruising in the Bahama Straits, and which interrupt the traveller from New Orleans to Philadelphia.

These motives, however powerful, did not alone fix my decision: I was anxious to avoid the ridicule which usually attends those who, in similar cases, after much trouble and expence, return with excuses for their failure.

I was not less apprehensive of those inexorable judges, who, seated tranquilly by their fire-sides, pronounce dogmatically on matters of which they are most profoundly ignorant; who injure by perfidious suggestions, prejudice the public, and are themselves the harbingers of such injustice that they force their victim, however innocent, to become, as it were, criminal.

I made, therefore, all my preparations; I exchanged my great barge against a pirogue made of the trunk of a single tree, much more light and easy to be steered, which were qualities very essential for going up the different rivers which I had to explore, or to descend the Mississippi, which, on account of its rapidity and the numerous obstacles which are every moment to be surmounted, required a slight vehicle, the motions of which should be quick and precise.

I dismissed, therefore, a part of my attendants, keeping only four Canadians, a Spaniard, and my hunter; my boat being able to contain only this number of men, together with Mr. Warin and myself.

I made a second journal, which I took care to fill with praises respecting the administration of the Baron de Carondelet, with the intention of leaving it open to the curiosity of all who chose to inspect it, whilst the true journal was carefully concealed. This little stratagem

will readily be forgiven me, since it saved me the disagreeableness of being sent to the Havannah, where I should probably have been detained a long time.

Having at length collected as many materials as possible respecting the countries adjoining the Missouri, particularly the province of the Illinois; after having communicated to Mr. Zenon Trudau,\* my well founded apprehensions that the armament which was preparing in Canada was destined against Upper Louisiana, and

\* I owe to justice and to the veneration I feel for the character of Mr. Zenon Trudau, Vice Governor of Upper Louisiana, a solemn declaration, which fully clears him from the accusation brought against him by the Baron of Carondelet, Governor General, for having suffered me to penetrate into the territory of his Catholic Majesty.

Mr. Zenon Trudau was never informed of my expedition; it was during the six weeks that I remained in the American part of the Illinois, that I undertook my excursion upon the Missouri, and before I had had the pleasure of being presented to him. The truth of this assertion will be very readily conceived, when it is known that there are neither forts nor posts, nor any guard whatever, on the banks of the Missouri, and that the mouth of this river is more than a mile and an half broad; if to these circumstances it be added, that I had taken the precaution to pass St. Charles in the night, it is not astonishing that the Vice-Governor should know nothing of the matter. The Baron of Carondelet was, therefore, in the wrong when he reproached him so severely on this account, and threatened to dismiss him. I know few men more attached to their government, or who serve it with

pointed out to him the means which I thought best fitted for the defence of St. Lewis, I gave him, on taking leave, my plan of an intrenched camp, and quitted the finest country in the world, in which there are neither warriors, merchants, nor farmers; which, notwithstanding the riches it contains, presents nothing but uncultivated lands, and half-famished inhabitants, with scarcely a sufficient clothing to protect them from the inclemencies of the weather.

In our passage to Kaskaskias, we learnt that all our letters coming from Philadelphia had been intercepted by the agents of the federal government, and that St. Clair, judge at Kaskaskias, had spread the most idle and injurious tales respecting the French nation, and particularly respecting myself.\* In consequence of these reports, Adjutant Warin and myself repaired to his house, accompanied by the justice of peace; where, after expressing to him my contempt for the baseness of his proceeding,

more fidelity and honor. With respect to the circumstances which prevented my going beyond the river of the Great Osages, they were entirely of a private nature, and concerned no one but myself.

\* I had met with this man on the Ohio; but as he travelled with more speed, he had preceded me. It was he who denounced me to Captain Pike, commander at Fort Massac, where I was arrested, as I have already related.

I caused him to make in writing the declaration which will be found at the end of this work, in the number of the justificatory papers.\* This Judge St. Clair was an Englishman, paid by the British government, and one of the chiefs of the conspiracy of Governor Blount, the purpose of which was to put the province of Louisiana into the power of England, as I had been informed, and of which I shall have occasion shortly to speak.

It being late when we reached Apple River † (*Rivière aux Pommes*), we stopped at this point with the intention of passing the night; but scarcely had we landed, when two Indians of the Chickasaw nation made their appearance. They were painted black, and had a white feather stuck on their forehead, which signified that they were on an expedition. I noticed this to Mr. Warin. After having surveyed us attentively for some moments, they advanced, and proposed to us a piece of buffalo in exchange for brandy; we refused, because we had no more provisions than were necessary for our consumption, and besides we were unwilling to furnish them with

\* See Appendix, No. 2.

† It must be observed, that I have already given the description of the Mississippi, from the Ohio to the mouth of the Missouri. This description, therefore, recommences from the Ohio, and continues to the entrance of the Mississippi into the Gulf of Mexico.

spirituous liquors; but as they insisted, and threatened to leave us their game for nothing, we took it that we might not displease them, and gave them a little powder and tobacco, which they accepted, without showing any marks of content or dissatisfaction, and withdrew.\*— Having been accustomed in the course of our expedition to such visits, we paid at first no great attention to this incident; but after a little reflection, not knowing what might be the number and the intention of those who thus followed us, we left the banks of the river, and went to encamp on a small unsheltered island, separated from the main land by a channel of about seven or eight hundred yards broad. We passed the night there without any molestation.

The next day we proceeded on our voyage as usual. Two leagues from Apple River, we saw on the bank so great a quantity of game, that we could not resist the inclination of landing in order to hunt; which led to an accident that may be mentioned on account of its singularity.

At the beginning of the hunt we were somewhat dispersed; Mr. Warin was on my left, and the hunter on

\* It will appear shortly that these two Indians followed us as far as the river of the Arkansas, distant from this spot more than three hundred leagues, where they attacked the unfortunate Warin.

the right: we had scarcely walked a quarter of an hour, when we heard the hunter utter the most piercing cries. We ran to inquire the cause, and found him seated at the foot of a tree, two steps from an enormous rattlesnake which he had just killed. "Oh!" cried he, on seeing us, "I am lost; I am a dead man: this cursed animal has just bit me in the heel!" The poor man had actually lost his senses; his eyes were fixed, and every muscle in his face expressed terror. While we were using our efforts to tranquillise him, and were bathing the wound with eau de luce, of which I had a phial, darting his haggard looks on me, he exclaimed: "General, have you got your almanack?"\* On my answering in the affirmative, he added: "Oh! for God's sake, lend it me!" As soon as he had it in his hands, he turned it over hastily, to find the sign of the month in which we were. Scarcely had he seen it, than imagining it was favorable to him, he exclaimed, with an enthusiasm which it is difficult to describe: "I am clear enough!" His emotion, indeed, began gradually to subside; and when he reached the boat, one of his comrades sucked the wound,† to

\* I had purchased a small almanack at Philadelphia, in which were the signs of the zodiac, and which he often amused himself in reading.

† This operation is performed by putting water or milk into the mouth, which is spit out at each aspiration.

which we applied a poultice made of eau de luce. On visiting it the next day, we observed a swelling and a violet tint; but the patient felt no pain. This accident prevented him neither from walking or working; and at the end of eight days there remained scarcely any marks of the wound.

In placing this event before the eyes of my reader, I trust that he will not suppose me so credulous, or so destitute of common sense, as to attribute the cure of this man to the sign of the zodiac. The cure was certainly produced by the suction, and the application of alkali to the wound; but I am firmly persuaded, that amidst the remedies which were administered to effect the physical cure of the patient, the sign of the zodiac had a most powerful effect on his moral feelings. We may appeal on this important question to the faculty themselves, and ask if they do not also think, that while a man is struck with terror, and his whole frame in a state of contraction, if such a situation will not neutralise the most efficacious remedies? For my part, I repeat, that if by chance this sign of the zodiac had appeared sinister to the hunter, I have no doubt that the effect produced on his imagination, already impressed with this idea, would have been such that he must infallibly have perished. Yes, terror is a real disease

which we owe only to the vices of education. Why are not the Indians affected with this sentiment as much as ourselves? because they are trained up to despise death, and we to fear it. A great part of our early education consists of errors, invented by falsehood and exaggeration, and propagated by ignorance. Who in his infancy has not heard or read in fabulous descriptions, that the bite of a rattlesnake is without remedy,\* and that canine madness is incapable of cure? These tales are circulated, and when once engraven on the imagination of youth, are not easily effaced. Hence that despair which takes possession of the mind when we meet with any of those accidents, which have been described to us under such terrible colors; despair which destroys us more speedily than the most subtle poison. If we can find a cure for terror, the remedy for many other diseases is not far distant.

In passing before Cape Girardot I saw Mr. Lorimier;† he told me, that having been informed I should re-descend the river, he had resolved to meet me, having very

\* Nature has been so provident in creating this reptile, that wherever a serpent is found, a remedy against its bite is sure to be discovered within a few yards of its haunts. I have often made this observation, and there is not a forester who is not well versed in finding these specifics.

† M. Lorimier is the chief of the Chawanons and Loups, of whom we have spoken under the article of Cape Girardot.

important information to communicate, which he had just received from Upper Canada, by Indian chiefs who were allies of the two nations which he commanded. According to their report, the English were preparing an expedition at Montreal, composed of two thousand regular troops, fifteen hundred militia, and several Indian tribes, and that all these forces were directed against Upper Louisiana; he added also that reports, although vague, had been spread, that English agents, dispersed in Tennessee and Kentucky, were organising another expedition, which was destined at the same time to attack Lower Louisiana, and that the governor of one of these states,\* gained over by England, was in the conspiracy.

As the first part of this report agreed perfectly with the information I had received during my residence in the Illinois, from two Canadians who had come from Quebec, I had no doubt that a plan was formed for the invasion of the possessions of his Catholic Majesty. I considered, therefore, from the alliance which existed between France and Spain, that it was my duty, as a Frenchman, to make use of all the means in my power to counteract this project. I engaged Mr. Lorinier to

\* It will be seen, that this news was perfectly conformable to the truth.

repair immediately to St. Lewis, and communicate to the Vice-Governor the new details which he had just given me, and assured him at the same time, that I would use the utmost expedition in giving information to the Governor-General of Louisiana, residing at New Orleans, as well as at the posts which I should have occasion to visit in going down the river. I regretted extremely that amidst the deserts where I was now situated, without any direct communication with Philadelphia, it was impossible for me to give any immediate information to the French and Spanish ministers resident in that city. This evil was without remedy: I therefore left Mr. Lorimier, satisfied with the new proofs of zeal which he had testified towards me, and without further loss of time resumed the course of my journey.

Having reached the mouths of the Ohio, I again examined, with the most scrupulous attention, both its banks, the isle in front of the river, and the opposite banks of the Mississippi. This second examination confirmed me in the opinion I had already formed on this subject; that it will be impossible for a long time, unless by immense labor and incalculable expence, to raise forts or military works on any one of these points, where if we may judge from the marks on the trees, the waters

sometimes rise more than twenty-five feet above the banks of the Ohio.

Eighteen miles from the mouth of the Ohio, on the left, is a cliff, called the Iron Mine. This cliff is two hundred feet perpendicular, but does not extend more than a thousand yards along the river; from the examination we made of its direction, which is north-east, it can only be a ramification of the chain of heights of which we have spoken in our description of the country of the Illinois, and which in this latitude begins to take a direction towards the south-east. Strata of clay of different shades may be distinctly seen in the cliffs, some of the color of ochre, others of a red or rose color, and some of a yellow saffron. These strata are intermixed with a very fine sand, of a black or rusty color, which is in general the indication of iron mines. But whether our researches were ill directed, or that we wanted sufficient knowledge of the subject, we were unable to discover the mineral, although it is the general opinion that this spot contains a very rich mine of this metal.\*

\* Naturalists who travel in this country ought to stop at this iron mine. If the river is low, they will find at the foot of the cliff a sand-bank, covered with petrifications. We may without exaggeration add, that every thing there is petrified; even the leaves of the trees.

About a thousand yards below this spot, the lands on the left are low and swampy, like those on the right, which continue the same from Cape Girardot. The chain of heights falls off towards the south-west, at the distance of five or six miles from the river.

After passing the Ohio, the current of the Mississippi is perceptibly less rapid, and its waters acquire a sort of limpid clearness.

The ingenious observation of Mr. Bernardin St. Pierre, in his *Studies of Nature*, on the current of rivers, is perfectly applicable here, and explains why the river of the Mississippi is so impetuous between the Missouri and the Ohio.

The Missouri, as we see in the chart, comes from the north-west, and consequently forms with the river, which runs north and south, an acute angle; hence the Missouri communicates all its violence to the Mississippi, because it is neither interrupted nor impeded by any obstacle. The Ohio, on the contrary, coming from the east, and falling into the river almost at right angles, the volume of its waters and its current, which are powerful enough to strike against the opposite bank of the Mississippi, interrupt, and suspend its course. This is so evident, that above the mouth of the Missouri the current of the river

is gentle, because it is naturally slow, and below the Ohio it resumes its ordinary course.

A similar remark has been made in the Missouri, the current of which is very moderate above the river Plate; but this coming from the south-west, in an oblique direction, and bringing with it muddy waters and an impetuous current, imparts the same character to the Missouri. It is, therefore, to the river Plate, and not to the Missouri, that this effect should be imputed.\*

It is observed, on the Mississippi, that the dews, which are very abundant when the winds come from the south and south-west, are scarcely perceptible when the winds blow from the north and north-west. The fogs also, which are very thick on the river from the southern winds, disappear as soon as the wind veers to the north.

From the Iron Mine to New Madrid† is reckoned forty miles. The navigation from the mouth of the Ohio to this point is generally good and free from embarrassments.

New Madrid is situated in thirty-six degrees thirty minutes northern latitude, on the right side, at sixty

\* See the particular description of this river.

† It is to be remarked that the two first persons we perceived when we landed at New Madrid, were the two Indians whom we had found at Apple River.

miles distance from the mouth of the Ohio, instead of forty-five, as is asserted by Mr. Hutchins in his description of the Mississippi; it is built in the hollow of a great bend, which the river makes in this place, and opposite a long salient point, intercepting half its bed, and which, when the waters are low, narrows the channel considerably, and forces vessels to steer very near the right side. This bank, though liable to inundations, is much more elevated than the bank opposite, which it commands on every side.

The river, which by its direction strikes with force upon this perpendicular bank, carries away, at different periods of the year, a considerable quantity of the ground on which the town and fort are built; this ground being composed of earth, washed down by the waters, is easily dissolved, and extends twelve miles inland, without changing either its nature or its level. Nothing can hinder this destructive effect, which will continue until the river in its progress reaches a layer of primitive earth; or rather, the glaxis of the chain of heights which runs in a parallel direction with it, but at twelve or fifteen miles from its actual bed. Every annual revolution carries off from one to two hundred yards of this bank; so that the fort, built five years since at six hundred yards from the side of the river, has already lost all its covered

way; and at the time we passed, the commander had given orders to empty the magazines and dislodge the artillery, having no doubt but that in the course of the winter the rest of the fort would be destroyed.

This fort is a very regular square with four bastions; in each are built four block-houses, connected by a range of palisadoes twelve feet in height, behind which is a good raised way; the whole is surrounded by a ditch twelve feet deep and thirty broad, with a small covered way, well staked and palisadoed. The artillery consists of eight eight-pounders, placed in the front of each bastion; the garrison consists of twenty soldiers of regular troops. Within the fort is a small house for the governor, an ill-constructed barrack for an hundred men, and a powder magazine covered with planks; there is a well, also, containing very bad water.

The whole country around New Madrid and the parts adjacent, being, as we have just observed, quite flat, and without any slope for the draining of the waters which are left in seasons of inundation, a great quantity of morasses and pools are formed around it, which render this spot extremely unhealthy; putrid fevers and agues are very prevalent from the month of June till November.

There are about one hundred families in this town, the greater part of which are French, and can each furnish

a man capable of bearing arms; but the Spaniards have so little dependence on them, on account of their attachment to France, that when the attack on Upper Louisiana by Genet was projected, Mr. de Bostel, commander of this post, stopped up the holes of the cellars, to hinder the militia from hiding themselves. We had this account from Mr. de Bostel himself.\*

Notwithstanding these inconveniences, a very fine mill has been lately built, at the expence of government, on a small creek, called St. Thomas. This mill is a very ingenious piece of machinery, of the invention of Mr. Venden, a Dutch engineer. The foundations are laid on piles, and constructed with great art and solidity; but the spot on which the building is erected, appeared to us ill chosen, the local circumstances being such that this place can never become a military post, or ever draw a great population.†

\* Several newspapers have given magnificent descriptions of New Madrid: the people of this colony are naturally lavish in their praises of the spot they inhabit; and they even pretend to be more industrious, and their condition less miserable than that of the colonists in the Illinois. They are, perhaps, in the right; a tarnished coat is better than rags.

† We have been since informed that the whole of these works are carried off and destroyed by the waters, and that no vestige whatever remains.

After descending one hundred and seventy-one miles below New Madrid, and through a country which is entirely a desert, we found on the left side a cliff, which, from its direction and nature, must be a branch of the chain of heights that runs parallel with the left side of the river, but which have ceased to be visible. This cliff is preceded by a small river, or creek, called by the French, *Rivière à Margot*; by the Americans, *Wolf River*; and by the Spaniards, *Las Casas*. A few yards from its mouth, it divides itself into two branches: the principal branch, called *Margot*, comes from the East; the other, called *Bayou de Gayoso*, takes its direction from the South. Opposite the mouth of the river is a great island, which is separated from the left side by a channel from forty to fifty yards wide, and which forms, with this bank, a kind of haven or port. The land is low and swampy.

The nature of the country is an assemblage of various small eminences running towards the North East,\* distinct from one another, and each having a platform separated by small vallies. On the inland side, the slope of these small elevations is gentle and easy; on the side of the water, they form perpendicular cliffs,

\* See the map.

which, as you descend the river, rise progressively from thirty to sixty feet. On the first of these heights A, in descending, and consequently on the lowest, is situated the fort which the Spaniards have lately built, called St. Ferdinand. This fort is commanded on the land side, at the distance of one hundred and twenty yards, by the platform B, as well as on the southern side by that of C. The choice of the natural position of this fort is faulty, and the plan of its construction no less reprehensible, since it has too considerable an extension for the surface on which it is placed; and the front of the two bastions on the land side occupy more than half of the inclined part of the platform. From the platform B, notwithstanding an inclosure of stakes which are twelve feet in height, the whole of the interior of of the two bastions is seen, and consequently the rest of the fort.

The form of this fort is a square with four bastions, surrounded, as we have observed, with stakes, without ditch, palisadoes, or even banquettes, and containing only eight eight-pounders.

The buildings, indeed, consist of a handsome house for the commander, an ill-constructed barrack for the troops, and a powder magazine covered with tiles. One

hundred and fifty men and three galleys form the defence of this place. Such is the fort which has cost to the Court of Madrid so much money, and respecting which so many statements, projects, and plans have been given, and which originated in ignorance, or were, perhaps, suggested by treachery.

We know that in a newly settled country, covered with wood, the bad choice of a position may be excused, because before the land is somewhat cleared, it is difficult to find out the true heights of the country which we wish to defend, especially when it is irregular and undulating: but the mode of construction of this fort is inexcusable.

If this establishment at first had no other object in view than to keep in awe the Chickasaws, a powerful nation hostile to Spain; it is only since the Americans have poured in on this part of the continent, and have shown themselves, like their ancestry, ambitious and enterprising, that the Spanish Court has been anxious to render this post capable of stopping them in their projects of invasion.

We repeat once more, that it is not below the Ohio that a position should have been chosen to defend its outlets; but above this river, since the ground did not permit of any works being erected opposite to its mouth.

I have already observed, that to be masters of the Mississippi, it is necessary to command the course of that river, and for the following reason:

Every vessel or armed galley ascending the river, is obliged to employ the greater part of its crew in rowing. These oars, fixed at distances of five or six feet, from one end of the vessel to the other, embarrass the working of the guns, which are placed in the intervals. In going up, the vessels are always obliged to present their heads, which is a very disadvantageous position: in some parts of the river also, the current is so extremely rapid, that it is impossible to stem it without keeping close to the shore, where the enemy, posted on points higher than the vessel and concealed behind trees and rocks, might kill great numbers without resistance; since not being seen by those in the boat, it would be impossible for them to know where to point their artillery, and even if the enemy were seen, the shot would be without effect, since it would be firing upwards.

A vessel which descends would require, on the contrary, but two or four oars, and a pilot to steer. The whole crew might, therefore, be employed in the service of the artillery or musketry; the vessel might keep the middle of the river, or approach either bank, or take whatever passage or position should be most advantageous

for annoying the enemy; while the vessel in falling down would present its broadside, and might attack or avoid a combat. Such evident advantages require no comment.

The fort, since it was determined to build one on this bank, notwithstanding its inutility, ought to have been placed on the platform D, which commands the rest; from this position, whatever should advance by the three small passes formed by the islands situated above the cliffs, and which opposite to these cliffs form only one, would readily be discovered, and the fort could also very easily defend the small road, and the mouth of the river Margot; and as the platform D is greater than those of A, B, C, the fort might have had as large an extent as should have been required. But we shall clearly show, in our general system of the defence of Louisiana, that every kind of fort on this bank, the object of which is the protection of the colony, would be more injurious than useful, and that forts are necessary only as stations for travellers, or to protect commerce and navigation; on this hypothesis block-houses are sufficient, because all the keys of the different positions on the left side are too far distant from the banks of the river; these, for example, are more than twenty miles.\*

\* See the point A in the chart.

Sixty miles below Margot Cliffs, on the right side, is the river St. Francis. This river comes from the north-north-west, and not from the north-west, as it is marked in all the charts. It is navigable three hundred miles for canoes. Half of my boatmen having fallen sick in this place of a fever and dysentery, I was obliged to steer the boat myself; these circumstances prevented me from going up this river, concerning which we have hitherto had so few details.

Ninety miles below the river St. Francis, and on the same side, is the mouth of the White River.

As this river appears on the charts to be confounded with that of the Arcks or Arkansas, the mouth of which is separated from the White River by only a slight distance, and an union with which is formed by a channel about six leagues from its mouth, Adjutant General Warin and myself resolved to take a minute survey of the outlets of these two rivers. We determined, therefore, that he should ascend, with the bark and two men, the White River as far as the opening of the channel, which he should cross, and wait for me at the point where it communicates with the river of the Arkansas; whilst I should continue with the canoe to descend the Mississipi, as far as the mouth of that river, and then re-ascend to the point where its waters

have made a passage, and communicate with the White River. The first who arrived was to wait the coming of the other. I gave Mr. Warin provisions and stores for eight days, and we separated at five in the morning.

On the second day, at half past four in the evening, I reached the place of rendezvous, and finding no one, encamped with my boatmen. The next morning, at nine, I perceived the bark coming up the channel, and when it approached, found Adjutant Warin lying along the boat, and suffering so much that he could scarcely speak or breathe. One of the hunters who attended him informed me, that at five in the evening of the day we separated, having reached the point where the channel of the Arkansas throws itself into the White River, they had resolved to pass the night on that spot; that whilst his comrade was gone to hunt, and he himself was gathering wood at a very small distance from the camp, two Chickasaws (the same we had several times met) approached Adjutant Warin, and gave him a piece of bear's flesh; that having accepted it, he offered them in exchange powder and tobacco, which they refused, and asked him for rum; after making some difficulty, M. Warin gave them each a glass, when they asked for another, which he positively refused. Seeing that they could not obtain it, one of them, with a club

in his hand, leaped into the canoe to seize on a small barrel of rum, when Adjutant Warin, in order to prevent his carrying it off, took up his carabine; the Chickasaw at that instant struck at his head with his club, which he avoided by throwing himself back, but unhappily received the blow on his breast, which stretched him lifeless in the canoe; that he, the hunter, hearing the noise, ran to the river, where seeing what had passed, he levelled his musket at the Indian in the canoe, and broke his arm, upon which they both took flight.

Without endeavouring to seek for any extraordinary cause of this deplorable event, I cannot help remarking, that these two Indians were the same who had followed us from the country of the Illinois, five hundred miles; that at each of our principal stations, we always found they had preceded us; that they were painted black, with each a white feather on their heads, a sure sign of war or an expedition; that there was only one armed with a carabine, and it is to be remarked, that it was the unarmed Indian who attacked Adjutant Warin; it seemed as if they were fearful of raising alarm by the report of a musket. On the appearance of the hunter, and his firing, which wounded one of them, they fled; nor did he who had his carabine loaded, and who was not wounded, fire either at the Adjutant or the hunter, who

was then disarmed. Were they apprehensive of my arrival, or of that of other hunters, or fearful of being discovered? Did they mistake Warin for me?—I accuse no one; I have no evidence of hostile intentions against me, but .....

\* It is to be observed that we were both of the same size, and were dressed in the same manner.

## CHAPTER XX.

*Continuation of the river Mississippi, from the White River to Nogales.—White River.—Channel of communication with that of the Arkansas.—River of the Arkansas.—Its red and brackish waters.—Fine country.—Sketch.—Animals and crystallisation.—Singular country.—Great quantity of animals.—Louisiana, with respect to its military relations.—The places where the rivers of the Arkansas and the Osages take their sources.—Supposition.—Negligence of the court of Spain.—Unsatisfactory reasons alledged by its agents.—Means to be taken to remove these difficulties.—Obstacles.—Bad fort.—Abuse of authority.—Population.—Indian anecdote.—Nature of the country between the Arkansas and the Yazoo.—River Yazoo.*

THE White River is from an hundred and twenty to an hundred and forty yards broad at its mouth; its direction is north-west, and it is navigable six hundred miles for boats of six thousand weight, but only in high waters,

that is, eight months in the year. Being much hemmed in, its bed narrows as the waters decrease, and discovers a great number of small falls or rapids. Its current is very strong when the waters are high, and more gentle when they are low.

Eighteen miles from its mouth, and on the right side, is the opening of a channel about forty yards in breadth, and through which a part of the waters of the river of the Arkansas empties itself. It is eight miles long, and is navigable only in high waters. During the months of July, August, and September, it is almost dry, and we were enabled to ascend only by an extraordinary swell of the water. Although the current be gentle in this channel, it is extremely difficult to go up, on account of the great quantity of sand-banks and drift-wood with which it is encumbered.

At the mouth of the White River is a small post of three men, which is a detachment from that of the Arkansas. The object of this post is to stop the entrance of this river, but it can be of no use with respect to the navigation, because when the waters are low, it is separated from the channel by a great sand-bank, which extends more than two miles; a passage might, therefore, be effected by keeping to the left side of the river,

without being seen by the post, which, it must also be observed, has no means of resistance.

After passing the White River, and proceeding ten miles, we reached the point where the river of the Arkansas empties itself on the same side. This river is three hundred yards wide at its mouth, comes from the north-west, and runs parallel to the White River. It is navigable nine hundred miles for the largest barks, except during the three dry months; at that season the navigation extends only one hundred and twenty miles.

Eighteen miles from its mouth, on the left, is the entrance of the channel of communication, which its waters have opened with the White River.

During the space of sixty miles from its mouth, both sides of the river are low and swampy; but at this distance, where are situated the fort and the village of the Arkansas, the country begins to be more elevated.

Ninety miles higher are five rapids, which are passable only in small canoes, when the waters are low; but when they are high, these rapids are entirely covered and imperceptible.

When the waters are low, the current of this river is almost as violent as that of the Mississippi, which is not the case when they are high, since the waters as they

extend flow more gently; the White River in similar circumstances is directly the reverse.

The river of the Arkansas rolls over a bed of sand, and washes a red soil, which gives a tint to the waters; and as it crosses, six hundred miles from its mouth, a range of rocks composed of pure salt, the water preserves a brackish taste, which renders it disagreeable and unwholesome.

After passing the line where the swampy country ends, the river of the Arkansas waters, perhaps, one of the finest countries on the globe. The land is of a chocolate color, with a vegetable mould from eight to eighteen feet deep, and a gentle undulation, which, by facilitating the draining of the waters, concurs to the salubrity of the air.

We can only repeat what others have already said or written respecting this charming country, which the more carefully we examine, the greater beauties we discover. On the horizon, mountains, the summits of which are lost in the clouds, and from whose base, stretched in lengthened perspective, lie plains of immense extent and fertility; the Arkansas winding, and varying every moment the form of these fine natural meadows; hills, sprinkled sometimes with beautiful groups of wood,

at other times with tufts of the laurel or magnolia; rivulets falling in torrents, or cascades from the mountains, and after numerous meanders throwing themselves into the river, are but a slight sketch of this delightful region, from which the traveller with difficulty withdraws his reluctant steps.

Six hundred miles from the mouth of this river are heights forming a chain, the continuation of that which we have already described in the country of the Illinois; here this chain falls back towards the south-west, and is filled only with minerals and crystallizations.

Between the sources of the river of the Arkansas and those of the Great Osages, is a valley, the extent of which may be estimated at one hundred and twenty miles. In the centre is a lake, the banks of which are perpendicular in its whole circumference, and composed of a rock of white salt, more pungent than common salt. From this lake flows a little river, traversing the plain in its whole extent, the banks of which river are nearly of the same nature as those of the lake.

The whole surface of this valley is covered with a small fine and thinly scattered grass, across which is perceived an almost impalpable dust; this is an efflorescence of salt in a state of continued reproduction;

since if it be swept away, the surface on the morrow is again covered.

In this plain are found also holes of different forms, some perfectly round, others oval or triangular, and often very deep, and filled with a saline water. The inside of the banks are lined with this salt, left by the evaporation of the water, from its level to that of the soil.\*

Numerous droves of wild bullocks, bears, roebucks, panthers, and elks, cover this plain, and in such numbers that it cannot be crossed without great danger; for this reason, the Indians never hunt but at a certain season of the year, when they can assemble to the amount of a thousand or twelve hundred warriors.† . . . . .

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\* The Indians who inhabit these countries (the Great Osages) make considerable use of this salt, of which they extract great lumps with pointed sticks, thrust into the crevices, and which serve for pincers; the Indians give a round form to these lumps, tie them to the end of lianas, and dip them in their food till it has attained a sufficient degree of saltness. We brought away with us several specimens of this salt.

† We are obliged here to leave an hiatus in our description. The governor of Louisiana, M. de Carondelet, having kept five chapters of our journal, one of which contains a detailed account of this interesting country. See the proces-verbal on this subject, with the justificatory papers.

When we take a military survey of the structure of this part of Louisiana, we must admit that the two rivers, the Arkansas and the Great Osages, are the two keys of Mexico; for though the mouths of these two rivers are separated by a space of more than six hundred miles, the one throwing itself into the Mississippi, and the other into the Missouri, nevertheless, as that of the Great Osages flows from the south-west, and that of the Arkansas from the north-west, the sources of each are so contiguous, that they are separated only by the narrowest part of the plain or valley, of which we have just given the description, and at the extremity of which is Santa Fé.

From the point where the navigation ends to Santa Fé is reckoned sixty miles; and from that where terminates the navigation of the Great Osages, is reckoned one hundred and fifteen or one hundred and twenty miles.

Thus, supposing two bodies of troops should assemble, one in the state of Indiana, at the mouth of the river of the Illinois, and opposite that of the Missouri, and the other in the Tennessee, at the cliffs of Margot, a little above the river of the Arkansas; the first ascending the Missouri and the river of the Great Osages, the second that of the Arkansas; they might both reach, in a few days, the same given point (Santa Fé), having nearly the

same navigation, and the same space to traverse. The difficulty which the right column might find in ascending ninety miles the Missouri, and in travelling overland sixty miles more than the column on the left, would be counterbalanced by the facility with which it might ascend the river of the Great Osages, which is much less rapid than that of the Arkansas; having once reached the head of these two rivers, the country presents no obstacles whatever either from mountains or rivers: we may, therefore, judge of what importance it is to Spain that these two outlets should be shut.

It might be imagined, that a communication so easy and direct with the capital of the country of metals, so well known, and bordering on the United States, would have fixed the attention of the Spanish government, and that different surveys, respecting the nature of this country watered by these two rivers, would have been made by engineers, in order to obtain certain data, on which a system of general defence might be established; or at least that some provisional measures of safety would have been taken to hinder and stop, by strong works and a respectable garrison, the navigation of this river. But all this has been neglected, nor has any person been employed by the government to go up this river for the purpose of taking military surveys; we are even ignorant of the nature

of the country that lies three hundred miles below the mouth of the river of the Arkansas. The opposition made by the natives against exploring this river is but a mere pretext to justify so culpable a neglect.

The Great Osages, which are the only nations that inhabit the sources of the river of the Arkansas, are esteemed by those who have visited them, the most gentle and hospitable of all the nations on the west of the river Mississippi; with great veneration for the Whites and particularly the French.

It is true, nevertheless, that possessing that part of the continent which is most productive in animals, they are extremely vigilant, and permit no stranger to enter their territory without their consent, despoiling and killing such as they meet, which keeps them in perpetual war with all the surrounding nations. This inconvenience is obviated by a direct address to themselves, and by taking them for guides. Mr. Choteau, an inhabitant of St. Lewis, who has obtained the privilege of trading with the Great Osages, among whom he has resided for five years, proposed to me whilst at Fort Carondelet, to go up to the sources of this river, accompanied by two chiefs; to traverse the space which lies between these sources and those of the Arkansas, and following the course of this latter river, descend into the Mis-

Mississippi. This journey would have employed three months at most, and there would have been less danger in adopting this mode, than in traversing many of the United States.

But no doubt the disgrace of seeing such a survey taken by a stranger, or rather jealousy, the companion of ignorance, were obstacles far more difficult to surmount than the pretended opposition of the Indians; these considerations led us to return without having been successful in rendering this service to Spain.

Two ill-constructed huts, situated on the left, at the distance of seventy-five miles from the river of the Arkansas, surrounded with great palisadoes, without ditch or parapet, and containing four six-pounders, bear the name of fort. The garrison entrusted with its defence, consists of a captain and fifteen men, three of whom, as we have already mentioned, form a detachment at the mouth of the White River.\*

\* At the time we passed, an engineer had been sent to the post of the Arkansas, with orders to build another fort or block-house. He proposed to occupy a piece of ground situated half a mile behind the fort, which was standing, and consequently at the same distance from the river, under pretence that the bank was continually washing away. But in this arrangement, the officer forgot that to defend the passage of a river, the banks of which are steep, the more distant he removed, the less able would he be to direct

It may easily be imagined how small a portion of respect such means as these are fitted to excite, either in the neighbouring powers or the Indian nations : the following anecdote, of which we were witnesses, will give us a just idea on this subject.

Two Chickasaws, the real tyrants of the river, met an Indian of the nation of the Mascous, with whom they were at war ; pursuing him to the palisado of the fort, they killed and scalped him under the eyes of the commander, who dared not defend the poor wretch, or grant him an asylum.

The commander, on the observation we made him that this act was a violation of the territory of His Catholic

his fire into the middle of its bed. Besides, block-houses or other works of that kind, which were sufficient formerly to overawe the Indians, are now become altogether useless ; because at present it is much more material to construct defences against the United States than against Indian nations, the greater part of whom are degenerated or destroyed. The only dangerous enemies for Spain, the only to be feared, are the Americans, as well for their population and their spirit of enterprise, as their local situation, which gives them ample means of conveying artillery of every bore. Such fortifications become, therefore, a derision ; solid works in earth, well constructed and judiciously placed, should be raised, till the population on the Spanish side puts it in a situation of building others still more durable.

Majesty, which appeared to us extremely reprehensible, replied that he had express orders not to mingle in any quarrel which the Indians might have with each other ; that the Chickasaws were a very powerful nation ; and that if he had prevented the murder, perhaps in a fortnight the post and all the Whites would have been destroyed.

The more probable reason of this conduct (for it is not likely that such an order should have been given) is, that this commander, as well as others scattered through Upper Louisiana, trading with the Indians to the detriment of the inhabitants, are more earnest in gaining over the greatest number of nations possible, in order to obtain a larger quantity of furs, than anxious to make the territory of their king respected ; because they well know, that, if they resisted their caprices and insults, these Indians would keep off from their counters, and would carry elsewhere the produce of their hunting. In this manner sovereigns are often degraded by their subjects.

A little behind this fort is a small village, which may contain from forty to fifty Whites ; these settlers, having no means of defence against the Indians, who are continually pillaging their cattle and robbing them of the fruits of their industry, are in general poor and miserable.

A single farm, belonging to Mr. Wolf, a German, evinced what might be expected from a country thus fertile. He was employed in gathering in his corn harvest, which yielded him two hundred fold. The quality of the wheat was certainly equal to that of the best departments of France ; which leaves no doubt, that under a government favorable to agriculture, this cultivation would be attended with the greatest success. But with an administration so vicious as the present, Mr. Wolf was compelled to display a constancy and firmness of character which are rarely to be found.

Having received a deputation from the chiefs of the great village of the Arkansas, I determined to pay them a visit, and be myself the bearer of the customary presents. In the course of our journey, which was nearly eleven miles, we passed several Indian camps; among others, one of the Mascou nation, then at war with the Chickasaws. I took advantage of this circumstance, to renew my experiment of pulsation on one of the chiefs of this nation, with a young Spaniard whom I had found at the Cliffs, and to whom I had given a passage as far as New Orleans: they were both of the same age and size: the experiment, made at eight in the morning and repeated three different times, gave on the average sixty-eight to

the Spaniard, and fifty-nine to the Mascou; the difference was consequently nine.

We proceeded on our way, and came in an hour and an half opposite the village of the Arkansas, situated on the other bank. My interpreter was very much astonished to see no one to conduct us to the place of embarkation; and the more so, as he had had the precaution to give notice to the chiefs, the preceding evening, of the day and hour we were to arrive. I observed to him, that the Indians were never servile in any action of their lives; and that the only thing which surprised me was, that they had left nothing on the bank that could furnish us with the means of passing the river, which was very wide, especially in this place; but that in looking we should perhaps find a canoe. We then gave our horses to the Spaniard to hold, and went in search along the banks of the river. We had scarcely proceeded fifty steps, before we discovered a small skiff tied to a great pole. I recognised in this action the character of the Indians, and easily interpreted their thoughts, which seemed to say: "Here is a canoe, here are oars; if you are not old women,\* make use of your arms." My companion agreed

\* This expression on the part of the Indians indicates cowardice, weakness, and in general every thing that wants strength and courage.

to the justness of my observation ; we took, therefore, each an oar, and crossed the river amidst the acclamations of the Indians, who were waiting for us on the opposite bank. After the usual ceremonies, we were conducted to a dance, the object of which was the celebration of a marriage.\* On our return, we were ferried over by women.

From the river of the Arkansas† to that of Yazoo is one hundred and fifty-eight miles. In this distance, excepting two passages, one called the Island à la Tête de Mort and the other the Island aux Chicots, which are encumbered with drift-wood, heaped up sixty feet high, and narrowing the channel, the whole of the navigation is good ; the current of the Mississippi, from the river of the Arkansas, becomes evidently more gentle.

From the Cliffs at Margot to the river of the Arkansas, and from hence to that of Yazoo, both sides of the Mississippi are swampy, and covered with great reeds or

\* There is a kind of soft and melancholy languor in the Indian tunes, and particularly in those of the amatory kind, which excite by attractive and irresistible emotion to a pleasure before unknown ; this feeling is heightened by the silence which reigns in these solitary abodes.

† It was in the river of the Arkansas that we saw the first alligators, and it appears that they are never met with above this latitude.

cypress trees; it is to be observed, that the latter are found only below the Arkansas, and that no wood of this kind grows above that river.

The mouth of the river Yazoo is situated thirty-two degrees twenty-eight minutes north, and is about three hundred yards wide. This river divides Upper from Lower Louisiana.

At the mouth is a considerable island, which forms two passages; and as the land is very low, it is difficult to distinguish the entrances.

In high waters, the Mississippi drives back the Yazoo fifteen miles, and overflows the country on both sides. The course of this river is nearly north-east, which at its confluence with the Mississippi forms a very acute angle.

An hundred and thirty miles above its mouth it divides into two branches; the western branch is called Cold Water River (*Rivière à l'Eau Froide*), and the other the Eastern River or the river of Yazoo. From the point of its division it traverses an undulated country, which becomes very mountainous near its sources. It receives a great number of rivulets, of which several are sufficiently large for the purpose of every kind of manufacture; in this number are the Lowbassha, the Jockengpitofa, and the Salt Hatche.

The land above Cold River is no longer swampy, and the higher you advance the more fertile it is found. There are even some points which have been cleared by the Indians. The country, as far as the sources of Cold River, is one of the most healthy in America: from Cold River to the mouth of the Yazoo, on the contrary, the inundations render the climate very unwholesome.

From the mouth of the Yazoo to Cold River, the country is covered with bamboo canes of a considerable height; from thence to its source is wood of different kinds, but neither the cedar, the pine, nor the green oak.

In the mountains where it takes its rise, very rich iron mines have been discovered. In general, the course of the Yazoo and the district of the Natchez are considered as the finest part of North America.

The river Yazoo is navigable for barges or boats as far as Cold River, or the Western Branch, that is, an hundred and fifty miles above its mouth, except in seasons when the waters are extremely low. There are a few rapids, but when the waters are high, they can be distinguished only by those who are well accustomed to the river. From Cold River, the Yazoo is still navigable seventy miles, to a point sixty miles below the village of the Chickasaws, but only for barks carrying four or five thousand weight. From this point its bed

narrows, and great obstacles are to be surmounted ; sometimes there are not even six inches of water: its course is gentle and slow, which renders it very easy of ascent.

The Eastern Branch, or Yazoo River, directs its course towards the river of Tennessee, from which it is separated only by a chain of mountains, rather lofty, which are ramifications of the Alleganies or Blue Mountains, and which will render this carrying-place or communication extremely difficult. From the sources of the Yazoo, or rather from the end of its navigation to the nearest point of the river Tennessee, is two hundred and sixty miles ; but from the different turnings of the mountains and the river, this distance may be reckoned at three hundred. There are two roads employed by the hunters and traders from the end of the navigation of the Yazoo, to reach the river Tennessee : the first passes by the great village of the Chickasaws, from thence to Hope Chapaw Creek ; when at this latter place, you can only reach Cumberland River on foot, on account of the steepness of the mountains.

## RECAPITULATION OF DISTANCES.

	Miles.
From the end of the navigation of the Yazoo to the village of the Chickasaws . . . . .	80
From the village of the Chickasaws to Hope Chapaw Creek . . . . .	70
From Hope Chapaw Creek to Cumberland	100
	<hr/> 250

The second road is that used by the traders; this road also passes by the village of the Chickasaws, but it then goes to Duck's Creek, and from thence to Knoxville. It is passable for loaded horses, but with great difficulty.

	Miles.
From the end of the navigation of the Yazoo to the village of the Chickasaws . . . . .	80
From the village of the Chickasaws to Duck's Creek . . . . .	150
From Duck's Creek to Nashville . . . . .	100
	<hr/> 330

The fur trade which is carried on by the Yazoo, is of very little importance. At present, the Indians, sur-

rounded by the Americans on the east and north, and by the Spaniards to the south and west, find scarcely any game. This branch of commerce is now reduced to fifty thousand skins of roebucks, and about seven or eight thousand pounds weight of beaver.

## CHAPTER XXI.

*Continuation of the military description of the course of the Mississippi, from Nogales to Bâton Rouge.—Nogales.—Fort of the Great Battery.—Fort Sugar Leaf.—Fort of Mount Vigie.—Fort Gayoso and St. Ignatius.—Reflections.—Turtles.—Black River.—Bayou de Pierres.—Islands of Bayou de Pierres.—Natchez.—Nature of the country.—Fort of the Natchez.—Gayoso Battery.—State of the fort.—Observations.—Town of Natchez.—Population.—Communication.—Climate.—Conspiracy of Governor Blount.—White cliffs.—Rock of Avion.—The Tonicas.—Pointe-Coupée.—Population.—Fort.—Cliffs of Pointe-Coupée.*

THE post of Nogales, called by way of irony the Gibraltar of Louisiana, is situated on the left of the river, near a deep creek, and on the summit of different eminences connected with each other, and running North East. These heights form a kind of spur, branching from the

chain of hills, which is no longer visible at the cliffs of Margot, and which falls away on the side of the Floridas.\*

These eminences rise gradually towards the country, during the space of forty miles,† from the banks of the river to the peak of this small chain.

The first of these eminences, that is of those that touch the banks of the river, do not form cliffs like those of the Iron Mine and at Margot; they slope away, on the contrary, very gradually, and it is at the extremity of one of their glacis that the first work A, called fort of the Great Battery, is placed. But as after building this first fort it was perceived, in clearing, that at about two hundred yards behind a small elevation commanded the battery, a block-house, B, was erected, on which were placed four howitzers pointed at the battery.

On the side of the river this battery is closed by a wall of masonry, twelve feet high and four thick, in which are crannies and embrasures: on the land side, a ditch four feet in breadth and three deep, and a palisado twelve feet high, surround the battery and the block-house.

\* See the plan.

† See the point B, on the chart of the Mobile.

Twelve pieces of cannon, four twelve-pounders, and eight eight-pounders, mounted on rotten platforms, compose the artillery. A house for the commander, barracks for two hundred men, and a powder magazine, are erected in this inclosure. On the left of this first work, at the distance of six hundred yards, is another small mound C, insulated and separated from the fort of the great battery by a great defile D, and which is about twelve feet deep and twenty broad.

To obviate this second inconvenience, another block-house has been erected on this kind of Sugar Loaf, in which are placed four four-pounders. This small work is surrounded by a bad ditch and a palisado, and is called fort Sugar Loaf. These two first works look upon the river.

About a thousand yards behind these two works, is a chain of small heights, which, connected with each other, form together a large and extensive platform E, that commands the whole of the space from the river, as well as the battery A, and fort Sugar Loaf B.

Three works have been erected on this platform. The first, F, called fort of Mount Vigie, and on which depends the defence of this post, is placed in the middle, so as to form a recess with the battery A, and fort Sugar Loaf B; but though it supports fort F, it cannot,

however, overlook the battery A from the elevation of fort B; so that after having carried the battery and the block-house, it would be very easy to form a lodgment at the foot of the eminence B, without risking a cannon shot from the other works.

The form of fort Mount Vigie is a perfect square, without bastion, with a parapet of four feet of earth, surrounded with a ditch and a palisado; on each of its fronts are placed two eight-pounders.

In the middle of this fort is a block-house, which serves for barracks; a well is also sunk.

To the right and left of fort Mount Vigie, at the distance of nearly four hundred yards, on a spot a little more elevated than the fort, two small block-houses are built, which serve for lunettes; they have no guns, and are surrounded neither by ditch nor palisadoes. The block-house placed on the left, G, is called fort Gayoso, and that on the right, H, fort St. Ignatius.

Such is exactly the present state of the defence of Nogales. If behind these three last works any new clearings should be made, it will infallibly result, from the nature of the ground, that the works F, G, H, will be commanded by some other points; in this case, new redoubts or block-houses will probably be built, till going on from one blunder to another, the point B, the natural

key of this position,\* be attained; this with a small share of intelligence might have been perceived at first.

Eighty soldiers and a captain are intrusted with the defence of these different forts, which would require at least a thousand men.

In whatever manner this position be occupied, with the view of protecting Louisiana against the Americans, it will always be ineffectual, unless possession be gained of the whole chain of heights: since, at present, only a small part can be supported, and this part is weak, and commanded by other points, which are in the power of the Americans, and which render them masters of the summits, as well as the sources of the rivers. Thus the whole of this puny fabric would be destroyed; for an attack may be made, not only by descending the Yazoo, but equally well in falling down the Mississippi; since the Americans can easily land at Nogales, and that with so much the more security, as the whole of these eminences are accessible on every side: such posts, in short, are good only when they can be supported, and defended by a strong population, which is the great advantage the inhabitants of the United States have over the Spaniards.

From what has been said, it follows that the left bank of the river being well peopled, and the right a desert,

\* See the Chart of the Mobile.

every military establishment formed on this bank, with any other view than that of fixing the limits, is on the part of Spain altogether useless, as long as its political situation with the United States remains unchanged.

Our Canadians discovered in this place a number of turtles' eggs, buried in the sand, along the banks of the Mississippi, when the waters are low. A Spaniard of our suite, who had lived a long time at Nogales, gave me the following account of the manner in which these depôts are formed.

“ This animal,” said he, “ looks out in summer for sandy banks, on which it can lay its eggs; it is led by instinct to choose the break of day: it then goes out of the water with great precaution, raises itself on its hind legs, looks around, and when sure of being seen by no one, crawls to the place which it judges most suitable, that is, to the spot which the waters never reach in this season, whatever may be the accidental freshes. When it comes to the point on which it has fixed, it raises itself anew, looks round with attention to see if it be not observed, and when it has this persuasion, it makes with its fore feet a hole, where it deposits its eggs, covers them, and rubs the place which conceals its treasure gently with its belly; it then returns, making a great circuit, careful always to take the side opposite to that by which it came.”

These turtles are scarce in the Mississippi; but are found in greater abundance in the Arkansas, and generally in the western rivers that fall into the Mississippi, from this latitude to the sea; these turtles are very large, but less than those which are found in the gulf of Mexico.

The Canadians find out these depôts from the polish left by the rubbing of the turtle on the sand, which is easily distinguished from the sand in its natural state, in which are irregularities, and slight undulations produced by the agitation of the waters.

From Nogales to Big Black River is thirty-nine miles. This river is situated on the left, and runs nearly parallel and in the same direction as that of the Yazoo.

This river is not more than sixty yards wide at its mouth; but in ascending it some miles, it is an hundred yards broad, and is navigable sixty or eighty miles for boats carrying from four to five thousand weight.

Its sources, for it has many, form different branches; some are very near those of the Mobile; those in the south-east take their rise in the height B,\* and those in the north-east in a little rivulet E, or a chain of mountains, which runs parallel with it, and which separates its waters from those of the Yazoo.

\* See the map of the Mobile.

The course of this river is often interrupted by rapids and small cascades. Thirty miles from its mouth, a great bank of rock bars almost the whole of its bed, and leaves only a passage of twenty feet wide and four deep.

In freshes these impediments are not perceived; but when the waters are only at a middling height, the greater part re-appears, and renders the navigation extremely difficult.

This river runs through a country which is irregular and very hilly, especially on the right side and towards its sources. The left side is even, and with fewer heights and rocks.

Ten miles below Big Black River, and on the same side, is Bayou de Pierres, or Stony River; this is only a large rivulet, which does not flow more than twenty or twenty-five miles inland. The bed being full of great rocks, it is navigable only for very small canoes. The country on the right, through which it runs, is low and very fertile; that on the left is more lofty, broken by heights and small vallies.

At the mouth of Stony River is a wretched hut; but there are several American settlements a mile above. Although at the mouth of this river the Mississippi forms no cliffs, it is, however, sufficiently elevated to prevent the country from being inundated in high waters.

Fifteen miles from Stony River, in the middle of the Mississippi, are two islands, called *Les Isles du Bayou de Pierres*, and by the Americans *Stony Creek Islands*. These islands, which are in front of the creek, fill up a great part of the bed of the river, and form three remarkable passages, of which there is only one navigable in the same year, the two others being choked up with drift-wood. This year it was the left which was open for the navigation; next spring that will perhaps be obstructed in its turn, and one of the other passages be alone navigable. Nothing certain, therefore, can be indicated to travellers, with respect to such difficulties.\*

Twenty-eight miles below these islands we reached the *Natchez*. The district of the *Natchez* begins at the river *Yazoo*, and ends at the *Tonicas*; it is one of the most ancient, populous, and important settlements of Lower Louisiana.

The town and fort are situated at an hundred miles from *Nogales*, on the left side of the river, and on a fine elevated plain, which we shall call the *Fourth Spur* from the *Ohio*, that branches off from the chain of principal heights, which we have so often mentioned. Its direction

\* See the general observations on the navigation of the Mississippi at the end of the work.

is north-east, like those of the three preceding, which are the Iron Bank, the cliffs of Margot, and Nogales; but it differs from that of Nogales, as it is less elevated, sinks perceptibly towards the country, and at ten or twelve miles distance is no longer visible.

This space forms also very considerable cliffs, which extend nearly four miles, and are from an hundred and eighty to two hundred feet high; which places this settlement out of the reach of inundations, renders a landing very difficult, or at least prevents it from being effected near the chief place of residence.

The principal eminence A\* is eight hundred yards from the bank of the Mississippi; its form is round, its slope gentle on the land side, but somewhat steep towards the river.

On the right, looking from the side of the river, is a large and deep defile B, which begins at more than a mile inland, and divides into two branches C, one of which, that on the left, turns and circumscribes a part of the eminence A. Its breadth near the river is not less than two hundred yards, and its depth one hundred; its sides are almost perpendicular, and embarrassed with trees, thorns, and thickset hedges; but towards its upper

\* See the plan.

extremity it grows shallow. Behind this defile, the country is irregular and intersected by a number of small defiles, which empty their waters into the first.

The principal eminence A, on which the fort is situated, neither commands nor is commanded by any surrounding height. It is also out of sight of the great defile; but this defect was remedied by raising the fort twelve feet with earth inclosed in a case made of planks, and strengthened with great beams. As this factitious parapet was preceded by neither ditch nor palisado, the present governor, Mr. de Gayoso, has constructed an inclosure of planks at forty yards distance, and has lately began, in front of this railing, a small covered way, of which nothing as yet appears but the tracing of the ditch.

Behind the fort, at a thousand yards distance, towards the head of the great defile, a small battery D has been erected, the form of which is a long square, open at the neck. The object of this battery is to prevent the approaching a small mound situated opposite, which if it does not command the eminence on which the fort is placed, is at least on the same level. This battery looks also into the deepest part of the great defile; it has neither ditch nor palisadoes, and is intended for four-pounders. This fort is called Gayoso Battery.

The form of the fort is an irregular hexagon, containing eight eighteen-pounders and eight twelve-pounders, barracks for two hundred men, a well which is not less than eighty feet deep, and a powder magazine. The whole is in a most wretched state; the buildings are falling into ruins, the platforms rotten, as well as the gun carriages; the cases which support the parapet are likewise so decayed, that were the fort to make use of its eighteen pounders, a part would infallibly crumble into ruins. Fifty soldiers, commanded by a captain, form the ordinary garrison of the fort.

Of the four positions on the river, and which we have lately described, this is, without doubt, one of the most perfect, for the following reasons:

First, That by means of the great defile an intrenched camp might be formed, in occupying all the small heights or undulations which surround the principal eminence, and inclosing, by this separation, all the small defiles, which are so favorable to the approach of the enemy:

Secondly, That this position being situated at only an hundred leagues from New Orleans, it may be supported and aided from that place, at least for some time:

Thirdly, That the Americans, not being favored in this geographical point by any considerable river, which

leads directly to this spot, can convey no artillery without making a great circuit:

Fourthly, This eminence not being externally connected with the principal chain of mountains, the Americans have not the same advantage of locality as the preceding positions offer, by seizing on the commanding points; they would, therefore, be compelled, in order to place themselves on a level with the fort, to force several outer works, which in this position would retard their operations and multiply their dangers.

But all these feeble advantages, which are partial and purely local, cannot remedy the defect which exists in the general structure of the country; this leads us to repeat, that *all the positions on the left side of the river, in whatever point of view they be considered, or in whatever mode they may be occupied, without the alliance of the Western States, are far from covering Louisiana: they are, on the contrary, highly injurious to this colony; and the money and men which might be employed for this purpose, would be ineffectual.\**

At a quarter of a mile, on the left, from the fort, and on the sloping part of a small height in front of the river,

\* It is almost useless to observe, that this survey was made in 1796, when Louisiana was threatened by the United States.

is the town of Natchez, which contains about an hundred houses, built of wood, and painted of different colors. The town is surrounded by a great number of fine farms and orchards, displaying in every part a high state of industry and prosperity. The population of the district of the Natchez is reckoned at about ten thousand souls, of every sex and age.

This population furnishes two thousand militia, formed into companies, part of which, in the pay of Spain, is in actual service. Independently of this militia, there are also two hundred dragoons, volunteers, well mounted, and who could easily be increased to five hundred.

In this population may be distinguished three classes of emigrants; the first is composed of those who first established themselves when this colony belonged to Great Britain; the second, of those commonly called Tories or Loyalists, who, at the period of the American revolution, took arms for the king of England, and who fled thither at the peace of 1785; the third class is composed of those who since the peace, discontented with the federal government, are come hither to form settlements, having purchased lands at a very low price.

These three classes are absolutely divided in political opinions: the first is purely English; the second is Anglo-American royalist; the third is republican, but the weakest

in number. They are, however, in general agreed on all questions respecting the federal government, which they equally detest, and against which their hatred is carried to such a point, that if ever it should be their lot to form part of the United States when the limits are fixed, conformable to the treaty between this government and Spain, they would transport themselves under the dominion of the latter, whatever repugnance they might feel to live under a government, which in their opinion gives no national character.

This colony, as well as all the posts established on the Mississippi, is subject to the great inconvenience of having no roads open with the neighbouring states; they can communicate, therefore, neither with Georgia nor Tennessee, and still less with the Floridas. Every thing must come and go from New Orleans by the river, which is the sole outlet and only market.

If the being thus insulated, and thereby depriving the enemy of all means of reaching them, has some advantages, militarily speaking, they are dearly purchased by the stagnation which is thus produced in trade and industry.

There is, nevertheless, a pathway to Pointe Coupée, where the great road, which is to lead to New Orleans, will begin; but this pathway is practicable only for horse

and foot passengers, and it requires five or six days to reach the place of destination. There is no habitation on the road, and several rivers to pass; from these inconveniences we may easily perceive how useless such a communication must be to commerce.

The climate of the Natchez, though hot, is much less so than has been asserted; and the duration of these heats, so much exaggerated, is very short. They begin about the month of June, and at the time of our visit (October 22), it was cold enough to render the warmth of a fire agreeable.

The winter is in general very mild: snow is sometimes seen, but it never remains long enough on the ground to hinder the cattle from grazing.

During my abode at the Natchez, I imparted to Mr. de Gayoso, governor of this province, the account I had received relative to the hostile preparations which were making in Canada. He appeared to me very much surprised at this communication, of which he acknowledged that he had not received the slightest information; and he was much more astonished when on the following day I procured him the most positive and circumstantial details, which I had gained by accident, and to which, I will venture to say, his Catholic Majesty and France owe the preservation of this colony.

The day fixed for my departure, one M..... an inhabitant of Tennessee, with whom I had become acquainted in the course of this expedition,\* gave me, in writing, information of which the following is the substance.

First, That a thousand inhabitants of this province, destined to attack the posts of Bâton Rouge, of Nogales, and Margot Cliffs, belonging to his Catholic Majesty, had been enrolled by Chisholm, an English agent in Tennessee.

Secondly, That Chisholm had made a general survey of Louisiana and the two Floridas, and determined the Creek and Cherokee nations to turn their arms against the Spanish possessions.

Thirdly, That Chisholm had obtained a list of fifteen hundred English Loyalists of the Natchez, of which list he M..... was in possession, who were engaged to take arms in favor of the English as soon as they should be in readiness to attack Lower Louisiana, and march, after this conquest, upon Santa Fé, in ascending the river of the Onachitas.

Fourthly, That a body was forming on the lakes, in Upper Canada, composed of fifteen hundred English, troops of the line; seven hundred Canadians, hired mi-

\* I had met with him in Kentucky.

litia; and two thousand Indians of the lakes, who were to be commanded by the Indian chief Brent.

Fifthly, That this body was to descend by the river of the Illinois, attack St. Lewis and New Madrid; to bear down on Santa Fé, following the course of the rivers St. Francis and the Arkansas.

Sixthly, That Chisholm had procured six field pieces, which he had embarked on the river Tennessee, and that these were the pieces destined for the expedition of M. Genet.

Seventhly, That the rendezvous for the Americans was fixed at Knoxville, in the Tennessee, for the first of May.

Eighthly, That Chisholm, who had concerted the whole of these measures, after having made his report to the minister Liston, at Philadelphia, had set out the twenty-eighth of March for London, in the brig Fanny, in order to inform the government of this project, and demand vessels and money for the execution.

Ninthly, That, in short, as a proof of what he advanced, M..... had given us the following original letter, written by Chisholm, in which he recommended to him to repair, at the time agreed on, to Knoxville, to act in conformity to the plan.

“ MESSRS. M..... and CR.....

“ You will take notice that it will be  
“ necessary for you to be in the state of Tennessee on  
“ the first days of May next, to put our project into  
“ execution; you may depend on my earnest attention,  
“ and that every thing agreed on between us shall be  
“ faithfully fulfilled, conformably to the existing plan.

“ I am, Gentlemen,

“ Your very humble servant,

“ JOHN CHISHOLM.”

M..... added to these details, that the governor of Tennessee was absolutely gained over by England, and yielded every support in his power to this project. He gave me besides a list of several persons of distinction, who held the first places, and who were in the interest of the Anglo-federal party. I shall not mention their names, because the greater number are out of place, and their party being overthrown, they have no longer the means of persecution;\* besides, although appearances

\* There are certain individuals, who, to give themselves an air of importance, after having lived, during the time they were in the United

were against them, it is possible that they may be innocent.

However alarming this information, it seemed certain that the expedition could not take place till the spring, which gave Spain more than time sufficient to take such precautions as were necessary to render it abortive.

We shall shortly see how I was welcomed by the Governor-General of Louisiana, for the important service I had just rendered his government.

The distance from Natchez to Bâton Rouge is estimated at one hundred and twenty miles.

In this space are several remarkable points, such as the Cliffs, the Rock of Avion, the Heights of Tonicas, Pointe Coupée, and the Cliffs of Pointe Coupée.

Fifteen miles from the Natchez, on the same bank, are small cliffs, of a color white as chalk, and perpendicular. They appear to form a branch of those of the Natchez, though they are altogether separated by low and swampy grounds. They do not extend more than

States, with the enemies of France, flattering their opinions, and conforming to their tastes in the most servile manner, talk of the persecutions which they underwent, while they were scarcely even the objects of the slightest animadversion. The French who were really persecuted, and who sacrificed themselves for their country, are those who have said nothing of the ill treatment they received.

six hundred yards along the river, and are lower than those of the Natchez. Their oblong form, their gentle slope, small extent, and geographical situation, render them, militarily speaking, susceptible of no point of defence.

The rock of Avion is situated thirty miles from the White Cliffs, and on the same bank; it is an insulated promontory, which, to the eye, has no connexion with the heights of the Natchez; it is composed of three eminences connected together, two of which front the country, and the third the river, touching its banks; the slope is very rapid, and difficult of access, but not perpendicular. Behind these heights are swampy lands, full of cypress trees. The part of the height nearest the river commands that which looks towards the country. In general, the rock of Avion is more elevated than the heights of the Natchez.

From the summit of the rock of Avion, on turning towards the east, an immense extent of country is discovered; the chain of the Natchez is seen running east-north-east, and sometimes north-east. The whole of the intermediate country, from this chain to the rock of Avion, is low, swampy, and intersected with cypress woods and small lakes.

On the western side is descried a great part of the course of the Red River, coming from the north-north-west, and forming at its mouth a very acute angle with the Mississippi. Ten miles from its mouth, the country which it traverses rises gradually, till it reaches the feet of the heights of Washita; the distance of which to the banks of the river may be reckoned at forty or forty-five miles, in a right line.

The rock of Avion might serve for the establishment of a very good post, being the only height of this kind between the Natchez and Bâton Rouge. But we shall enter into no details on this subject, as this position will necessarily belong to the United States, if the boundary line be fixed at the thirty-first degree and an half of latitude.

The Tonicas is not a river, but a channel or passage opened by the waters of the Mississippi: its entrance is situated on the left side, six miles below the rock of Avion, and its outlet at forty-five miles from its entrance; it is almost fifty or sixty yards broad at its mouth. This passage is practicable only in high waters and in going up; since it would be too dangerous to descend, on account of the rapidity of its current, and the great obstacles with which its bed is encumbered.

Immediately after the outlet of the Tonicas, on the same side, is a small insulated height, called the height of the Tonicas; this spot is remarkable only from the probability, after the observations made, that it is the point of the frontier line, which is in future to separate the possessions of Spain and those of the United States.

Twelve miles below, we left on the right the highest mouth of the Mississippi, called Chafalaya; this is the first outlet, the waters of which, after traversing a very fertile country, empty themselves into the bay of St. Bernard.

The district of Pointe Coupée begins at the entrance of the Tonicas, and terminates at False River; the first settlements which we found were, however, thirty miles below the entrance of the Tonicas; it is at this point also that the waters of the river begin to be restrained by artificial dikes.

Thirty-six miles before reaching the church of Pointe Coupée, we left on the right another channel, opened by the waters of the river, and which is only sixteen or twenty yards broad at its mouth. It is dry during the whole summer, and is navigable only for pirogues in high waters, and only in going up; having, from the embarrassments and rapidity of its current, the same inconveniencies for descending as the Tonicas.

By this passage, the road to the church of Pointe Coupée is shortened twenty-one miles.

The population of Pointe Coupée, according to the last enumeration, amounted to about ten or eleven thousand souls, in which number there are not above three hundred men capable of bearing arms.

Three miles on the left before reaching the church, are the ruins of a fort, of which scarcely a trace remains. Its figure was that of a square, flanked by four bastions of earth; the ditch is entirely filled up, and the parapets effaced; the commander and one man form the whole of the garrison.

Fifteen miles from the church of Pointe Coupée, on the left, we meet again with a very feeble branch of the heights of the Tonicas, which had disappeared; it seems that the last ramification of these heights terminates at this point.

This branch, called the cliffs of Pointe Coupée, extends a mile along the river. These cliffs are not more than thirty feet in height, and are formed by a number of small perpendicular cliffs, extremely white, and altogether of the same nature as that of the White Cliffs; they fall away behind with a gentle slope of two miles, and end in swampy ground. Their direction is north-east, like the others which we found on this bank.

The cliffs of Pointe Coupée are too equal, and have the ground on their summits too irregular to establish a post of any importance; these cliffs can never serve for any other military object than as a point of observation against whatever comes from the Natchez or the Bâton Rouge, the distance from which is not more than thirteen miles



## CHAPTER XXII.

*Continuation of the military description of the Mississippi from  
Bâton Rouge to the river Plaquemine. — Bâton Rouge. —  
Military position. — Fort. — Reflections. — Intrenched camp. —  
River of Iberville. — Observations. — Designation of different  
channels. — Communication of lake Pont chartrain, by the rivers  
Amit and Tanchipas. — Passage of lake Maurepas. — Observa-  
tion. — Channel of Iberville. — Inconveniences of its navigation.  
— Remarks on the river Anatahama.*

THE district of Bâton Rouge begins at False River, and ends at that of Iberville. It is a new settlement, amounting to no more than five or six hundred inhabitants.

The etymology of Bâton Rouge goes back to the time when several Indian nations inhabited these countries, and who, in order to mark their bounds, made use of a great pole or stick, which they painted red, and which was placed on the frontier line.

The post of *Bâton Rouge* is a small platform A,\* on the left side of the river and from twenty to twenty-five feet above the level of the highest waters. The left of this post is supported by a small creek B, navigable for canoes eight months in the year; in which creek there is a constant current. Its right ends by a gentle slope in a cultivated plain C. It is bounded behind at six hundred yards distance, by a vast grove of cypress trees D, in which there are from ten to twelve feet of water in the season of inundations, but which, in dry weather, forms an impracticable morass.

In the front runs the river, the banks of which form, as we have just observed, the steep E of twenty or twenty-five feet, sometimes perpendicular, sometimes accessible, but always difficult. At the foot of this talus, the alluvion has formed the low ground F, which is very unequal in breadth. The soil is sandy, but solid, and is covered in high waters.

Eight hundred yards from the creek B, on the summit of the platform, are the sources of the little rivulet G, which throws its waters into the *Mississipi*, and which, in its course, has formed a very deep defile. The road passable for carriages, coming from *Pointe Coupée*,

\* See the Plan.

and leading to New Orleans, crosses; it and if we except the little mound H, which must be regarded as factitious, being only an Indian tomb, the whole of this platform is a perfect planimetre, uninterrupted either by woods, defiles, or any undulation whatever. Its extent may be about three thousand yards in length and six hundred in breadth.

The fort I is situated about eight hundred yards from the creek B, near the sources of the little rivulet, and about a thousand yards from the mound H. Its figure is that of a star; it has a ditch with a covered way, but is so neglected since the peace, that the covered way has disappeared altogether, and the embrasures which were on the parapet, serve at present for entrances to carriages. Nothing remains but the commander's dwelling and a small barrack; the garrison consists of fifteen men.

On the supposition that Louisiana belonged to any other power than the United States, and that by some wrong system of policy, in contradiction with the laws of nature, and the rules of military operations, such power should be desirous to retain possession of any territory on the left side of the river, the position of *Bâton Rouge*, notwithstanding its defects, would become a very important point, since it is the only one which

exists between the Tonicas, where the new limits are to pass, and New Orleans. On this hypothesis, Bâton Rouge covers this last place against every thing which could come down from the upper part of the river, the distance of which is only one hundred and twenty miles; during that space, the land is constantly low, uniform, and opened by a great communication which leads to the capital.

The enemy once master of Bâton Rouge, necessarily gains possession, from this situation, of the whole of this bank to the mouth of the river; since he meets with no obstacles of any kind to his progress.

From this sketch it may be perceived, that the weak part of this position is the left C; and it was also on this side that it was attacked by the Spaniards, who took advantage of the small mound H to erect their batteries against the fort I, and of the steep E to make their approaches. But the defect of this weak part is less considerable, as long as those entrusted with its defence are in possession of New Orleans; since the points of attack are turned on the side of this place, and those which present most difficulties, are on the side of the United States.

The Americans can never attack the post of Bâton Rouge, but by descending the river, or in coming by

land along the road, which from Pointe Coupée ends at the creek B; but to effect this purpose they must force either the passage of the river or that of the creek; since they cannot turn this position in the rear, on account of the insurmountable obstacle occasioned by the cypress marsh, the extent of which is yet unknown.

This being admitted, the object which ought to be kept in view in the holding this position, is to present every difficulty, both of nature and art, against whatever should come from the Upper Mississipi, either by water or land.

To carry this point into full execution, it would be expedient;

First, To occupy the whole platform, which would be easy, from its little extent:

Secondly, To keep back the waters of the creek by a sluice, so as to cause an inundation, which from the nature of the ground would naturally form a junction with the waters of the cypress marsh:

Thirdly, To protect the sluice by a redoubt formed at the point No. 1, which should contain a good battery, so placed as to point its fire on the sluice and the river:

Fourthly, To erect a small flèche at the point No. 2, to guard the whole of this part of the inundation, and

chiefly the point of junction between the water of this creek and that of the cypress marsh:

Fifthly, To leave the principal fort I as it stands at present; taking care only to give it a different form, so as to fulfil the double object of supporting the redoubt No. 1, and the passage of the river.

By the first arrangement, the rear, the right, and front of this position would be perfectly covered, and nothing would remain but to provide for the left. But the enemy cannot attack on this point, until the passage of the river be forced; and it is not probable, militarily speaking, that this would be attempted, because his position would become so much the more dangerous, since a body of troops, marching from New Orleans, would place the enemy between two fires, and cut off his communication with the river.

Nevertheless, as every thing should be foreseen, since events the least probable frequently take place in war, the right should be covered by a good redoubt, closed by the defile at the point No. 3, which should connect, on the road and the river, with another small redoubt at the point No. 4, where the ground begins to incline towards the plain and the cypress marsh, and where the fires of both would cross with those of the redoubt No. 5.

A staccado should be formed between the river and the redoubt No. 3, to bar the passage of the slip of ground formed by the raised earth E, and a few gallies should be placed under the protection of the fort No. 3.

To complete this defence, it should be examined how far it would be proper to rase the mound H, or whether it would not be preferable, and this is our opinion, to build a good redoubt to support those of Nos. 3 and 4; in this case, these should be opened by their gorges.

This position, defended by a thousand or twelve hundred men, would be very respectable, and force the enemy to a great expenditure both of men and money, in order gain possession it; motives sufficient to stop any power, and still more the Americans; since a single war against the Indians, for a few years, would be sufficient to exhaust their finances, if we may judge by the expence incurred for the maintenance of that in which they have lately been engaged against the Six Nations,\* during three campaigns; although their troops never exceeded the number of two thousand effective men, with a very feeble train of field pieces.

From Bâton Rouge to the river of Ibberville is reckoned thirty miles. Before we speak of these two rivers in their

\* See Mr. Wolcott's statement of the expences.

various details, it is necessary to animadvert on a few errors which exist in every geographical chart of this part of the world.

The names of Massiac, Manchaque, Ascantia, Amit, and Ibberville, which are found in almost every chart, are so mingled together, that it is become at present almost impossible for a stranger to know what are the passages or canals which they describe; and these errors still exist even among the inhabitants of the country, when they speak of this internal navigation. The consequence is, that they often confound the space which separates the river from the lake Maurepas, with that which separates lake Maurepas from lake Pontchartrain. In order to avoid this confusion, we shall distinguish, by particular names, the country watered by these respective rivers, from lake Pontchartrain to the mouth of the canal of Ibberville; and in order to be more intelligible, we shall begin our description by lake Pontchartrain.\*

The channel or passage which leads from lake Pontchartrain to lake Maurepas, ought to be called the river Massiac, and the two passages formed by the Great Island,

\* We took ourselves the survey of this river, from the Mississippi to the river Amit; the remainder, from the Amit to the sea, has been furnished by a pilot well acquainted with this river and the lakes.

ought likewise to be distinguished, that on the north-west by the name of the Small Channel, that on the south-west, by the name of the Great Channel. The large island which forms these two passages is called Massiac Island. The space from lake Maurepas to the Fork of the Amit and Ibberville Rivers, ought to be called the river Amit. The distance between the point where the river Amit makes this fork and the Mississippi, is called the channel of Ibberville, the word river being improper, since this channel is supplied only by the waters of the Mississippi, and that only when its bed is full; that is, from the beginning of February to the end of June.

I shall now make a few observations respecting the navigation of these different channels, and the nature of the adjacent country.

At the entrance of the river Massiac, after leaving lake Pontchartrain, the depth of water is from three to four fathom; this depth continues the same half way the channel, keeping always on the western side. Having reached this point, we directed our course along the middle of the channel, where the depth of water is four or five fathom, till we reached the point of Massiac Island, which forms two passages. Though both are equally deep, the South-West, or Great Channel, is the best, having less windings than the Little Channel, and

consequently shorter and less filled with shoals. In the great passage the depth is never less than five fathom. The distance from lake Pontchartrain to lake Maurepas is eleven miles.

There is another communication from lake Pontchartrain to lake Maurepas, and which is much frequented by the Indians; this passage is made by going up the little river Tanchipas, which falls into lake Pontchartrain, the sources of which river communicate with another small river, called Nitabani, and which falls into lake Maurepas; but this passage is practicable only for canoes, and is eighteen miles in length. This communication, which is longer than the other, and more difficult, is but little resorted to by the inhabitants; it ought not, however, to be overlooked, as far as respects its military position, and a post at the junction of the sources of these small rivers is indispensable.

A mile before leaving Massiac river, and entering lake Maurepas, care must be taken to keep very near Massiac Island, to avoid a great sand-bank, which is on the opposite side, and which extends nearly two miles. By steering in this manner during these two miles, seven feet water will be found on the bar; but the moment this bar is passed, the soundings give fifteen and sixteen feet, which is an indication of the entrance into lake Maurepas.

In order to traverse lake Maurepas with safety, we must keep close to the north side, about the distance of a mile or a mile and an half. In following this course, the soundings are always from eight to fifteen fathom, on a gravelly bottom; the distance in crossing from Massiac River to the Amit is about eight miles. The lands bordering on lake Maurepas are all very low, often swampy and covered with wood, which renders it very difficult to distinguish the mouth of the river Amit, the direction of which, in going out from the river Massiac, is west-south-west. It is situated in the bottom of a bay, and its entrance may be known by the great quantity of drift-wood accumulated on both sides, and forming considerable masses, the greater part of which is dry when the waters are low. The marks on the trees show that when the waters are high, both banks of the river Amit are covered to the depth of a foot and an half; this kind of ground continues a league, reckoning from the mouth of the river; the land then rises a little, and is no longer liable to the same inconvenience, at least in ordinary freshes. Half a league higher the country lowers again, and is full of marshes and bogs; here the waters, from the mark on the trees, appear to rise to the height of three feet, which proves that the lands are half as low again as those which are at the entrance of the river.

From lake Maurepas to the point where the river Amit throws itself into the channel of Ibberville, a distance of forty-one miles, we meet with a considerable number of small tributary rivers; as these are all very carefully noted in the chart, it is very important for those who navigate this river without a pilot, to follow it exactly; since all the lands watered by the river Amit being extremely low, covered with wood, and the mouth of these different rivers presenting, on the first inspection, the same breadth as the bed of the river Amit, it is easy to mistake, and to ascend one of these instead of the Amit itself.

The nearer we approach the point where the Amit joins the channel of Ibberville, the stronger the current becomes; its rapidity is sometimes three miles an hour, while near lake Maurepas it is scarcely to be perceived.

The channel between the waters of the Mississippi and the point where the Amit joins, which we have designated by the name of channel of Ibberville, is but sixty yards wide at its mouth, and is navigable only when the waters of the Mississippi are at their greatest height, the season of which we have already mentioned. This distance is reckoned eighteen miles. When the waters of the Mississippi flow into the channel of Ibberville not to return, which lasts only four months, this channel is navigable;

but the instant the waters of the river diminish, the navigation is interrupted by the immense quantity of drift-wood which is accumulated at this point, and which so embarrasses the channel, that it is sometimes choked up. Independently of this obstacle, when the waters are at the lowest, in the months of August, September, and October, a part of the channel is entirely dry, which obliges the boatmen to unload their barges at the mouth of the river Anatamaha, and carry their goods and vessels across the land to the Mississippi. This portage is nine miles. The other portion of the channel of Ibberville, that is, from the river Anatamaha to the Amit, continues to be navigable, because it is fed by the waters of the river Amit, which flow back to this spot. I have thought proper to enter into these minute details, in order to give a clear and just idea of these different currents of water, which are very important to be known, as well in a military as a commercial point of view.

During the whole course of the navigation of the river Amit, the depth of water varies but little, and we constantly found from twenty to twenty-five, and never less than eighteen feet. Decked vessels, therefore, and brigs may go up this river at all times; but as soon as they enter the channel of Ibberville, and immediately after

passing the river Amit, the water falls suddenly to ten, eight, six, five, four, two feet, and at length to zero.

In the whole of this passage, which may be reckoned at seventy-nine miles, counting from lake Maurepas to the Mississippi, the oar alone can be used; there is too much water for the poles, and the branches of the trees which line both banks fall so low, that it is impossible to hoist a mast. These inconveniences, however, are but momentary, and it is easy to conceive that they will soon disappear, whenever the country shall be cleared and peopled.

Though these lands are in general low and formed by depôts, some variations may, however, be remarked between the river Anatamaha and the river Amit. This space, fifteen miles in length, is composed of two sorts of ground; during the first six miles, the land is low and under water to the depth of ten feet; after which, at irregular distances of six and eight hundred yards, are little gentle elevations covered with bamboos, and which are never overflowed: these spots are called Tayou-Lasay.

The little river Anatamaha, which signifies in the Indian language fishy river, is remarkable for the immense quantity of fish of all kinds with which it is filled, and which is without doubt the reason why it is frequented

by such multitudes of alligators; this circumstance renders the navigation very dangerous for persons who venture alone and without sufficient precaution.

We have just observed, that a part of the channel of the Ibberville was choked by the drift-wood which the current of the Mississippi leaves at every annual overflow, and by a great quantity of trees that fall into the water from both banks, and which, reaching from one side to the other, present an impenetrable barrier to the trees and drift-wood brought down the stream. Several attempts have been made to open this passage; it was undertaken by the English at the time they were in possession of this colony, by sawing, when the waters were low, these immense pieces of wood, that at the increase of the waters they might float away. But unfortunately, this operation was begun at the head of the channel, that is, in the part nearest the Mississippi, instead of beginning below, near the mouth of the river Anata-maha; from whence it followed that the trees which remained whole, continued to stop those that were cut; because it is the water of the Mississippi which flows into the channel of Ibberville, and which instead of flowing back empties itself into lake Maurepas. There is no doubt but if they had begun in the lower part, this channel would at length have been cleared.

It is thought that this communication might be very useful for the trade of the Floridas and the Mobile with Pointe Coupée, the Natchez, the Attacapas, the Natchitoches, and the various establishments formed to the west of the river in Lower Louisiana; but time and circumstances do not permit me to enter into a question of this importance.

## CHAPTER XXIII.

*Continuation of the military description of the Mississippi, from the river Plaquemines to the Balise.—River Plaquemines.—Fork of Chetimacha.—Observations.—Nature of the country.—Arrest of the author.—New Orleans.—Canal.—Forts.—Reflection.—Departure for the Balise.—Estimated distance.—English Bend.—Fort Plaquemines.—Observations.—Otter Passage.—South-west Passage.—East Passage.—Time necessary to go up to New Orleans.—Mistakes on this subject.—Singular country.—River of the Mobile.*

SIX miles below the river Ibberville, on the right, lies Plaquemines River, called river as improperly as the preceding, being only a passage, which the waters of the Mississippi have made towards the west, to empty themselves into the gulf of Mexico, in passing by the Appelouza. Like the Ibberville, this passage is dry after the rains.

Thirty-six miles lower, on the same side, is another outlet of the river, called the fork of Chetimacha, which also conveys the overflow of the waters of the river into the gulf of Mexico, after passing the Attacapas.

#### RECAPITULATION OF THESE DIFFERENT BRANCHES.

1. Chafalaya, on the western side:
2. River Ibberville, on the eastern side:
3. River Plaquemines, on the western side:
4. Chetimacha, on the western side.

We observe with regret, to the disgrace of the different powers which have been in possession of Louisiana, that no detailed or certain knowledge has yet been acquired respecting the nature of these different channels. A few traders or forest men have descended to no great distance from the mouths of these outlets; but no one with talents fitted for such a survey has yet undertaken to reach by one of these openings the bay of St. Bernard, or that of the Attacapas, and in coasting return to the mouths of the Mississippi by sea: hence it follows that every one gives a different account, and that the government, as well as individuals, have very uncertain notions respecting the nature of the country through which these branches flow, the state of the navigation, the means

which might be employed to overcome such obstacles as may occur, and in short the nature of the posts and harbours where these channels empty themselves, either in the bay of St. Bernard or that of the Attacapas.

From the fork of Chetimacha to New Orleans is reckoned sixty miles.

The whole of this space is remarkable neither for its military position nor for its channels; it is much more so for the finest settlements of Lower Louisiana, which succeed each other without any interruption along both sides of the river to the capital.

The first we met with were those of the Accadians, so well known by their industry, their social virtues, and their love for their country. Next to these are the Germans, the oldest settlers in Louisiana, and who are inferior to the Accadians neither for industry nor moral qualities.

After these are the vast plantations of our great colonial capitalists, which are become so advantageous within these few years from the cultivation of the sugar cane; the growth of indigo and cotton has given place to this new production, the rapid success of which will prove an abundant source of riches to the colony.\* It is

\* See the Chapter on Agriculture.

amidst this charming landscape that the traveller is conveyed gently on by the current of the river to New Orleans.

My fellow traveller and myself had reached the distance of only two leagues from that town, when we were arrested at the house of Mr. Bore, where we had alighted. I shall not interrupt the thread of my narration, by giving in this place an account of this transaction, which will be found at the end of this chapter.

The town of New Orleans is situated on the left side of the Mississippi, and not on an island as many travellers have related; although it sometimes happens, that the water, by means of a channel, encircles the ground on which it is built, as a ditch surrounds a fortified place; this channel was at first made by inundations, and completed afterwards by manual labor. As this ground, if we may use the expression, is thus enchased on the left side, and part of the bank of the river follows the same direction, without any irregularities or jutting points, the bed of the river is neither larger nor narrower either above or below; there is no reason, therefore, why this spot should be called an island, and still less to doubt whether or no it belongs to the left side.

The spot on which the town is built, as well as the country surrounding it to an indefinite distance, is level,

without heights, mounds, or the slightest undulation, and both banks are of the same nature.

The form of the town is that of an oblong square, five streets in breadth and seven in length, each at right angles. The population is composed of about ten thousand souls, including the free mulattoes and the slaves. The proportion of whites is six thousand, one thousand of whom are militia, and two hundred formed into a company of dragoons. The houses are in general built of wood, except a few public edifices.

At the upper part of the town, opposite the river, is the draining channel, which has been opened from the river to lake Maurepas. It is twenty-four feet broad, and eight feet deep. This channel furnishes water to the ditch which surrounds the town, by means of a sluice.

The defence of this place consists in five small forts, and a great battery, the whole of which is distributed in the following manner.

On the side which fronts the river, and at both ends of the town, are two forts, Nos. 1 and 2, which look upon the road and the river. Their figure is a very regular pentagon, having a parapet of eighteen feet thick, lined with brick, with a ditch and covered way. The ditch is eight feet in depth, and twenty broad. In each of these forts are barracks for one hundred and fifty men, and a

powder magazine. The artillery is composed of twelve twelve and eighteen-pounders.

Between these two forts, and in front of the principal street of the town, is a great battery, No. 3, opened on the side towards the river, and which crosses its fire with those of the two forts.

The first of these forts, that is, the fort on the right, and which is the most considerable, is called St. Charles,\* and the other St. Lewis.

In the rear, and to cover the town on the side next the country, are three other forts Nos. 4, 5, and 6, which are less considerable than the two first. There is one at each of the two angles of the square formed by the town, and a third between these two a little in front, so as to form an obtuse angle. These three forts have no covered way, but only stakes and palisadoes. They are each mounted with eight guns, but of what bore I am ignorant; there are barracks, also, for an hundred men.

That on the right is called fort Bourgogne; that on the left St. Ferdinand, and that in the middle St. Joseph.

The five forts and the battery cross each other's fires, and are connected by a ditch forty feet broad and seven deep. With the earth of the ditch has been formed, on

\* It was in this fort that we were imprisoned.

the inside, a causeway three feet in height, and on which were placed great picquets of twelve feet, very near each other. Behind these picquets is a small banquette. On the side of the ditch the earth has been simply thrown out, which renders the slope gentle and easy. By means of different communications formed between these ditches and the draining channel, there is always four feet of water, even in the driest seasons.

It must be admitted that these forts are well kept up; but at the same time they look rather like mock fortifications, from their diminutive size, and especially from their ridiculous distribution, than places of war; for there is not one of these forts that is sheltered, and which five hundred determined men could not carry sword in hand. Should one of the two principal forts, either that of St. Lewis or St. Charles, be taken, the others are rendered of very little importance; for by turning a part of the guns against the town, it would immediately be forced to capitulate, since it might be burned in an hour, and all its inhabitants destroyed. None of the forts can contain above one hundred and fifty men: but when Mr. de Carondelet adopted this bad system of defence, it is more likely that he had rather in view to keep his Catholic Majesty's subjects in due subordination than to cover the town; and if this be

the case, he has completely attained his object. It is one of the misfortunes of this government, to have more to fear from enemies within than from those without.

Continually surrounded by bayonets during our residence at New Orleans, it was not possible for us to reconnoitre in detail the country which surrounds it, and consequently we can give no just idea of the proper mode of defence, considering the importance and situation of this place. It however appeared to us a point to examine, whether a well-planned fort with just proportions, and in a state to sustain a siege, could not be better placed on the spot where fort St. Lewis is situated at present, especially by adding a few works to defend the passage of the channel, to the point where it begins to enter on the swampy and impassable marshes; a passage which may be reckoned at twelve or fourteen hundred yards. In this case, it would be unnecessary to fortify the town, which cannot be attacked on the lower side, provided the entrance of the river be defended.

An air always damp, stagnant waters, and marshy grounds, cannot but have a very noxious influence on the human constitution. Ages must elapse before a country just emerged from the waters can be sufficiently dried, and the air acquire a proper state of purity. It is then

only that New Orleans will cease to feel the effects of its origin.\*

After having remained in a state of arrest fifteen days at New Orleans, where I lost my unfortunate fellow-traveller, who died in consequence of his wounds, and having rendered him, with the sentiments of the most tender friendship, the honors due to his virtues and his talents, I embarked on board a king's galley, and was conducted to the Balise, where I was to remain till a vessel should convey me to the United States.

The distance from New Orleans to the mouths of the river, that is, to the Balise, is reckoned ninety-nine miles. During the first forty-five miles both sides of the river continue to be well inhabited; but the number of good houses diminishes very perceptibly as we proceeded, till we came to the English Bend (*Détour des Anglais*), where the country begins to be swampy and uninhabitable. From this point there is not a single settlement, no jettées or roads; the surrounding marshes are covered with reeds and rushes, and serve only for shelter to water fowl.

The English Bend is an elbow of the river, which from this part to the sea makes several windings. This

\* Of four persons, including myself, who arrived at New Orleans, three died in the course of eight days.

point was formerly chosen by the English to defend the entrance of the river, and two small forts had been erected; but the Spaniards have abandoned them, and have chosen a better position twenty miles lower, called the Bend of Plaquemines (*Détour de Plaquemines*), which is only eighteen miles distant from the first mouth of the river. Here a very considerable fort has been constructed, called fort Plaquemines. This fort is situated on the left side of the river, at the mouth of a small creek, called Mardi Gras, on a moving marsh which extends as far as the sea, and which presenting no outlet by the land can be reached only by the river. Its form is so irregular, that it is difficult to give any clear description, especially having had but a transient view. It is a bastion, closed by two long branches broken in the middle, which gives it, at the first glance, the air of a hornwork. The parapets which front the river are eighteen feet thick, lined with brick, and it is surrounded with a ditch twenty feet long and twelve thick.\*

The two great branches and the gorge are defended only by a causeway, the width of which has been taken from the ditch; this ditch is of the same breadth and depth on each side as in the front; on the causeway are

\* See the plan of this fort.

placed picquets twelve feet in height. Mardi Gras Creek furnishes water to all the ditches.

Within the fort are barracks for three hundred men, a house for the commander, and a very good powder magazine. On the northern side is a small bank, that extends a thousand yards along the river, and is directed upon one of the points of the bastion, in which is a gate with a drawbridge. This is the only outlet of the fort, without running the risk of being swallowed up in the mud.

Twenty-four guns of different sizes form the battery, and a captain with an hundred men, who are relieved every month, form the garrison.

This fort is intended to defend the entrance of the river, and consequently to cover New Orleans on the side of the sea. In this point of view it is excellent, and the spot has been perfectly well chosen; not only because it is covered by the creek of Mardi Gras, but also because it is situated precisely at the point where the land on both sides ceases to be adherent and practicable. It is of course impossible to land on either side the river, either above or below the fort, and for this reason, no approach can be made without constructing works which cannot be undertaken but with the necessary materials, such as are not easily conveyed by water. The difficulty would not

be less were an attempt made to force the passage of the river; since no other vessels can enter than sloops and small frigates: independently of the consideration that the fort would present a very formidable artillery against vessels of slight construction, by means of red-hot balls and bombs, which an enemy could scarcely resist. The river in this place is not more than twelve or fourteen hundred yards in width, and on the supposition that a few armed vessels should force the passage, transports would certainly run the risk of being sunk one after the other. It may also be observed, that as long as this fort exists, the communication between the sea and the invading army would be in danger of being intercepted.

Two galleys, therefore, placed under the protection of the fort of Plaquemines would be sufficient to hinder any force whatever from ascending the river; and we may add, that an enemy acquainted with the place and dispositions would never undertake the invasion.

But these advantages are not without their inconveniences. These moving or rather floating grounds admit of no foundation, on the solidity of which there is any dependence. The fort, that is the part covered with brick, though built on piles twenty feet long and two thick, and fixed within six inches of each other, has already given way more than three feet on the side of

the creek, and two on the eastern side. The linings of brick, and which have been constructed scarcely three years, are as much damaged as the other parts. The banks of the river are every day falling in, notwithstanding the stakes and the hundred galley slaves employed the whole year to keep them in repair; these circumstances lead us to doubt whether the land will take any firm settlement, at least for a long time.

Eighteen miles below fort Plaquemines, on the left side, is the Otter Passage (*Passe de la Loutre*), the most northerly of the whole. Six miles below we left on the right that of the south-west, and twelve miles still lower is the Balise, about four hundred yards up a small creek which runs into the Great or Eastern Passage.

It was here that I was landed at the house of the master pilot, called Ronquille, an honest and intelligent man, and to whom I am indebted for the permission of having visited the coast and different passages of the river.

The Otter or North-Eastern Passage has been choked up these forty years past, and is navigable at present only for canoes. An American vessel, which a few hours before my arrival had entered it by mistake during the night, instead of the eastern passage, had struck. I accompanied the master pilot, who went to carry succour, and we found it twelve hundred yards within the entrance of the

passage, ashore on the mud. As the tide was at ebb, we waited for the flood to see if the vessel would not rise: all efforts were useless, and we were obliged to unload her till she drew but three feet of water, her lading being four and an half. During this operation, I sounded this bar for two miles, and never found above three feet and an half of water.

The Western Passage is somewhat better, and has been stopped only ten years. The master pilot, who had resided at the Balise since the cession of Louisiana to Spain, assured me that he had piloted vessels through; though at present there is not above five, six, and seven feet water. I sounded it also at different places, and found no variations,

The Eastern or Middle Passage is that which is now used, and, according to his account, is the best which the river has ever opened.

Its ordinary depth in the bar is fourteen feet, and in the most favorable season, with wind and tide, is fifteen feet and an half measured with the pole and not with the lead, which is very different, on account of the bending of the cord when the soundings are made with the latter.

The highest tide is never more than two feet and an half or three feet, and common tides but a foot and three

inches. This pass is nearly three miles long, and from forty to fifty yards broad; from whence it happens, that a vessel, stopped in the midst by contrary winds or by any other accident, and forced to cast anchor, would entirely block it up. The pass changes its direction more or less every month, so as to occasion fresh soundings and buoys. Its direction at this time was south-east. The north-easterly winds were then preferred by the master pilot, both for coming in and going out.

With respect to the time commonly employed in navigating vessels from the Balise to New Orleans, which, like every description of this river, has been much exaggerated by those who have written on this subject, the whole amounts to this:

The common passage from the mouth of the river up to New Orleans is eight, nine, and ten days; the shortest is five, and even four, as I was a witness with respect to an American brig the *Active*.

The tide at all times of the year rises as high as Plaquemines, which is a third of the way; and as the river has several windings, it is impossible, in whatever direction the wind blows, that it should be always contrary. If, therefore, a vessel be well directed and keeps close to the wind, the passage cannot be longer than ten days.

But there are so many ignorant seamen and so much bad shipping employed in this voyage, that the captains, to excuse their blunders, never fail to attribute their delays and losses to the great impediments they meet with either in going up or down the river, and hence the variety of absurd tales which are related. The following instance, of which I was an eye witness, is a proof. A three-masted vessel, drawing thirteen feet water, Captain Th. . ., an American, master, and belonging to Mr. Flechier, merchant, at New Orleans, remained eleven days at the Balise before she could go out, though there were fourteen feet water in the passage, and the winds were excellent. He attempted twice to cross the bar, and twice he was obliged to return to anchor at the Balise, and at last unload a part of his cargo, which caused a considerable expence and loss of time. If it be asked, how this happened when the winds and tides were both favorable, it may be answered, that the captain was an ignorant man, that his vessel could neither carry sail nor keep the wind, that it was ill ballasted, drawing thirteen feet and an half ahead and but twelve astern, which prevented him from steering. Ronquille, who knew the ship and the captain, as soon as he saw it coming down, said to me, "Here is a vessel that will not go out." He

told me the reason, and repeated it before the captain, who paid no attention to his observations, and who did not fail to lay the whole blame on the difficulty of the navigation, for the expence and loss of time which his ignorance had cost his employers.

It might naturally be presumed, after the great inundations which take place in the upper parts of the Mississippi, that the mouths of the river are equally overflowed; this is not the case, although there is scarcely six inches difference between the level of the water and the banks. The reason is obvious; for the whole of the ground which forms the mouths of the river as high as Plaquemines, are what is called floating, and rise or sink with the river. It has even been observed, that there is less water in the pass when the river is very high than when it is low. The south-west pass is however an exception to this rule, and does not feel the same effects; as I found, on examining the whole, that the lands which surround it are adherent to the gulf, as well as all the islands without the mouths of the river.

There are, nevertheless, certain times when these floating grounds are overflowed, but this never happens but in those convulsions called hurricanes. The sea at these seasons rises to a prodigious height with respect to

the land, which is covered from ten to twelve feet, as happened in 1794.

The whole of the coast, from the mouths of the Mississippi to that of the Mobile, called West Florida, is a vast uniform solitary plain; but where an elevation interrupts this sameness, the country presents a more smiling aspect, and the air is pure and less humid. This uniformity is sometimes broken by forests, which extend, according to the nature of the ground, to the edge of the gulf: these are large trees grouped together, without symmetry or order, and with little underwood.\* The soil, near the sea-coast and the mouths of rivers, is either a dark and unwholesome marsh, or composed of light and sandy earth which produces nothing. Great tracks of white sand, in which grow only pines, border these marshes; the country appears dull during the summer; in winter this appearance must be much more desolate.

With respect to the Mobile, I received the following account from an officer who resided several years in the town of that name. The mouth of the bay of the Mobile is situated in thirty degrees fifteen minutes northern latitude, and eighty-eight degrees twelve minutes longitude from the meridian of Greenwich. Its bar is formed

\* Among these trees the oak is found in great abundance.

by a great number of sand-banks at one and two leagues distance from its mouth, and on which there are commonly fourteen or fifteen feet of water. Although these sand-banks often change their place and direction, the depth of water is almost always the same.

After passing the bar, the soundings increase gradually, and yield from five to seven fathom. This depth continues to the point of the Mobile, where on the eastern side is good anchorage in six and seven fathom of water.

The inner part of the bay is every where ten and eleven feet deep, and this depth continues the same till within three leagues of the town.

In this bay there is neither rock nor stone; the bottom being of mud, if any vessel touches it meets with no damage.

From the point of the Mobile to the town is a distance of eleven leagues, which is the length of the bay. In this space the breadth varies from three to five leagues.

The town of the Mobile is situated at the extremity of the bay, on the western side, and in a marshy soil, surrounded with large pools or inlets of water, which render the situation extremely unhealthy. In spite of these inconveniences and disadvantages, the town is already considerable; a small regular fort has been con-

structed of brick, as well as barracks for officers and soldiers.

Several small rivers flow into the Mobile. At three or four leagues from the mouth of the bay, and on the eastern side, the first that presents itself is the river of Bon Secours; the second, a little to the north, is Fish River (*Rivière des Poissons*). Several neat settlements are already formed along their banks. Five or six leagues above these rivers, and to the west, are two other considerable rivers, one called Hen River (*Rivière aux Poules*), and the other, a little to the north, Dog River (*Rivière aux Chiens*). It is at this point that large vessels are obliged to unload, and that the navigation of boats and other small craft begins.

About ten leagues above the town of Mobile, the river is intercepted by a great island, which forms two passages; that on the east is called Tansa, and the other the Western Passage. The last has a bar, on which are only seven feet of water. A little to the east of this same passage, and two leagues above its entrance, is the Spanish River (*Rivière Espagnole*), in which there is at high tide nine or ten feet of water.

Three leagues above the Tansa, the river Alabama throws itself into the Mobile. This river runs north-east,

traverses a space of more than fifty leagues; that is, from the confluence of the rivers Causa and Tapalouse, both very considerable, and on the banks of which are the principal settlements of the Creek nation.

Above the junction of the Alibama and Mobile Rivers, this last loses its name and takes that of Tombachee.

Ninety-six miles from the mouth of this river is fort Tombachee. Forty leagues higher are the sources of this river, near which is situated the great village of the Chickasaws.

The Tombachee is navigable for goëlettes, or other vessels of the like burthen, forty leagues above Dog River or Taskuloussa; beyond this point there is depth only for barges or canoes carrying five or six thousand weight.

From the village of the Chickasaws is a carrying-place of about three miles, at the end of which are the sources of Bear's Creek, which falls into the Tennessee River; and although this country be very mountainous, it would be easy to open a communication, in following the direction of the defiles. The nature of the country and the lands, from the mouths of the Mobile to its sources, may be divided into three distinct classes. The first, which extends from the point of the Mobile to the confluence of the Alibama, is swampy for three quarters of a mile along the banks of the river, and is fit only for the cul-

tivation of rice; this is ground brought down by the successive overflowings of the river; it is of a blackish color, mixed with sand.

The second extends nearly a mile and an half farther inland, and rises about four or five feet, in the form of a step, above the level of the other. The country is equally flat, without the slightest elevation; the lands are never overflowed, and are covered with very fine wood of an enormous size; such as the white cedar, the cypress, and the green oak. The color of the earth is brown or chocolate; indigo, hemp, flax, and tobacco flourish here exceedingly.

The third in succession is a more elevated and hilly country. The lands are covered with green oaks, walnut trees, and pines of an extraordinary height; but though they are of a good quality, these lands are very inferior to those of the two other classes, being fit only for maize, potatoes, and plants which require a very light soil.

Further inland, and towards the west, is a country of a very different nature. Here are natural meadows of an immense extent, intersected with marshes, and which offer excellent pasturage for all sorts of cattle. But to the east of the Alabama River, onward to the river Chatahoochée, is a country covered with bamboos so large and thick that it is almost impenetrable.

The Mobile, generally speaking, ought to be considered as a river of the first order for commerce, after the Mississippi, because whenever the population is so extensive as to admit of a portage between its sources and Bear's Creek, which falls into the Tennessee, the Mobile will undoubtedly be one of the shortest and most direct communications between the sea and the states of Tennessee and Kentucky.

A considerable trade was carried on at the time the English were in possession of the Mobile; the exportation on an average, in furs and skins, was about three hundred thousand francs a year: but since it has been in the possession of Spain, the government of which has had the impolicy to grant the English Company the exclusive trade of this country, there is no more industry, and the exportations at present do not amount to more than half this sum.

## ARREST

OF THE AUTHOR AND OF JOSEPH WARIN,  
ADJUTANT-GENERAL, BY M. DE CARONDELET,  
GOVERNOR OF LOUISIANA.

BEFORE I reached New Orleans, I stopped at Mr. Bore's, a planter, in Lower Louisiana, whose house is situated two leagues from that capital.\* I proposed remaining there twenty-four hours, to examine with some attention the interesting experiments which he had made on the sugar cane, the first which till now had been crowned with any success. I intended, in consequence, to send Adjutant Warin to the Governor the next morning at day-break, to inform him of my arrival, and to present him with the

\* It is easy to conceive that all that I describe from the time I left Mr. Bore's till I reached the Balise, must be very imperfect, since I had only confided it to memory, after classing the different objects in my mind.

letters and passports which I had received, as well from the minister of his Catholic Majesty as from the French plenipotentiary at the United States.

The 27th, at day-break, and at the moment that Adjutant Warin was preparing for his departure, I was informed that the Governor's barge was arrived with the Major of the place, Mr. Gilmar, and an officer of the regiment of Louisiana, and that these gentlemen desired to speak with me. Being introduced into my apartment, the Major told me that he came by order of the Governor, to congratulate me on my arrival, and offer me his barge. After returning him my thanks, I observed that Adjutant-General Warin was about to wait on the Governor in the course of the morning, to remit to him the packets with which I was entrusted, and to inform him that I intended myself the honor of paying him my respects on the following day. The Major replied, that the Governor requested I would repair to the town immediately. I observed to him, that the disorder in my dress\* absolutely required that I should make some changes: he then told me, that his instructions were to bring me as I was. I asked him if it was an *order* which he

\* I was in the same dress with which I had travelled among the woods for ten months.

signified to me; he told me, yes. I instantly obeyed, in order to prevent the Major from offering any greater insult to my country. Adjutant-General Warin having expressed to me his desire to remain in my boat to take care of the crew, received the same order as myself to enter the Governor's barge, leaving all my effects at the mercy of the rowers. A quarter of an hour after we had embarked, we perceived on the dike a troop of fifty dragoons, who were directing their course towards Mr. Bore's habitation. The Major having perceived them, made a signal with his cane to order them back, which they appeared perfectly to comprehend. I asked him what this troop meant. He replied, that it was the ordinary patrole. When we came to within four hundred yards of the bank which fronts the Governor's house, an officer of the place made a signal to the Major, which led him to exclaim: "Ah, it is singular; they are making me signals to go to the fort." I asked him if that was the apartment which the Governor destined for the officers of the French republic, before they had had the honor of being presented to him. He told me, that he was obliged to follow his orders; and on this our conversation ended.

On our landing we were conducted, amidst a crowd of people, to Fort St. Charles, and put into the officer's

guard-room; in which was placed the same officer who escorted us in the barge. Two grenadiers were stationed as centinels at the door with drawn sabres; one also was posted at the window; two other grenadiers, with fixed bayonets, for greater security were placed on the outside of the door, and another on the parapet opposite the window. It is to be observed, that during the night the garrison of the fort was doubled, as well as the patrols, both horse and foot.

After these sage dispositions, Adjutant-General Warin was ordered to repair to the Governor's house, and was conducted by the Major and Adjutant of the place. The Governor received him very politely, and having begged him to sit down in his cabinet, in the presence of the Auditor of war, the Interpreter-General, and Secretary of government, he asked him if he were disposed to answer the different questions which he was obliged to ask him relative to the expedition which he had undertaken with General Collot, etc.

Adjutant-General Warin having replied in the affirmative, and sworn to declare the truth, he underwent a kind of examination; after which he was conducted, by order of the Governor, to an inn, where he was guarded by a corporal and two soldiers, with fixed

bayonets, who passed the night with him, though he was much indisposed.

At one in the afternoon, the Major and Adjutant entered the guard-room: I asked them if they had received in writing the order for my arrest; they answered me in the affirmative. I requested them to give me a copy of it, which they refused. I then begged leave to write a note to the Governor; but the officer of the guard, Mr. Donois, told me very politely, that this was impossible; that Adjutant Metzingue had given orders that I should have neither pen, nor ink, nor even a pencil, and that every thing, even the bread,\* which entered the guard-room should be examined; in short, nothing was wanting but chains.

About four in the evening, the Major, Adjutant, Interpreter-General, and Under Secretary, came and deposited in the guard-room my baggage, which was huddled together, my trunks which were open, the boxes which were broken, and put on the seals before me, without making any inventory, or following the regulations necessary on such occasions.

\* The Governor formally disavowed this order, and threw the odium of it on Mr. Metzingue, who had acted thus from a refinement of malignity: I should be happy to believe it.

The Adjutant, after this ceremony, asked me for my keys, in the name of the Governor. I told him, that the whole of the effects contained in the boxes, as well as the papers in my porte-feuille, belonged to the Republic; that being only the depositary, I could give up my keys to no one but the Governor, and upon receiving an authentic discharge; by which he rendered himself solely responsible for the consequences that might result from the publicity given to my papers, which were equally interesting the two allied nations.

The Adjutant, notwithstanding this declaration, had the impertinence to take my bunch of keys from the table; I ordered him immediately to return them, adding, that if he refused, he should learn from me that the Republic was powerful enough to obtain his head from his sovereign, if it thought that any offence committed by him could be of sufficient consequence. The Adjutant changed color, put back the keys, and withdrew.

At five the same evening, the Governor sent me word by an officer, that were he not prevented by a head-ach, he should have waited on me, but that the next morning at eight he would repair to the fort.

At the hour appointed, the Governor, attended by the Auditor of War, the Under Secretary, and Interpreter-General, arrived. After the usual compliments

on both sides, the Governor inquired if I were disposed to answer the questions which might be asked me. I replied, that I should answer nothing till I had had a previous and private conference with him, and until he had read the letters which I had brought him from our respective ministers. The Auditor withdrew with his suite.

After half an hour's private conference, in which the Governor read all his letters, and learned the motive of my journey, which interested so nearly both nations, and during which he seemed less concerned at the precipitation with which he had acted in this affair, than anxious to find the means to extricate himself, he told me, in order to save appearances with the Auditor, that he should be obliged to examine me, but the questions he should ask would be insignificant and matters of mere form.

As soon as the Auditor returned, I underwent an examination, at the close of which the Governor offered me a house in the town, where I should remain on my parole, with a messenger. I accepted his proposition, and the Governor very politely lent me his carriage to conduct me thither.

Having returned next day to pay me a visit, the Governor asked me if I preferred giving him, under the promise of inviolable secrecy, communication of my

papers, to going to the Havannah and wait till the two courts should have decided with respect to this affair. Having reflected on the inconveniences attending this last alternative, on account of the delay which it would cause to my return to Philadelphia, where I had to transact affairs of importance to the republic, I did not hesitate to communicate my papers; but on condition that the Governor should engage, by writing, to give no information whatever respecting their contents to any person, and that they should be all faithfully returned to me. The Governor gave me his word, and sent me in consequence the letter No. 1, to which I answered by that of No. 2.\*

I remained under arrest at New Orleans till the first of November, during which time the governor and myself held daily conferences relative to the interests both of France and Spain. He assured me, that he had read with the highest satisfaction my memorials, which agreed perfectly with every thing that he had repeatedly said and written to his court, since he had had the administration of this province; he even asked me for certain observations respecting the danger of opening the Mississippi, which I gave him, on taking a receipt. The Governor made no other answer, than that he was not on suffi-

\* See Appendix.

ciently good terms with his minister to write to him; but in violation of his most sacred engagements, losing all respect for himself, for an allied power, for his own government, he caused several of my manuscripts and most precious charts to be copied, and among others that of the Ohio.\*

In consequence of the proposal which the governor made me in his letter of the date of the twenty-eighth October, to go to the Balise and wait for a vessel, and thereby tranquillise the inhabitants, who were alarmed by my presence, I went on board the king's galley, accompanied by a captain of the regiment of Louisiana, who landed me at the Balise, at the house of the master pilot, situated in the midst of a morass, from which it was impossible to go out, except in a canoe, without danger of being swallowed up by the mud, full of insects of every kind and other reptiles, which are the natural produce of such situations. I remained here till the twenty-second of December, when I embarked for Philadelphia, on board the Iphigenia brig.

The Governor, in his letter to the French Minister, justified the conduct he had observed towards me by the following considerations:

\* Major Gilman, who copied them, gave me this information.

First, On the silence of the minister, who had given him no previous information of my arrival.

Secondly, The information he had received from Philadelphia, that I was employed in a secret mission which he ought to distrust.

Thirdly, The report made to him by a subaltern officer, that I was making a survey of the province.

Fourthly, The alarm into which my presence had thrown the inhabitants, especially after the reports which had been spread by the American newspapers, that Louisiana was about to become a French province.

Nothing can be more futile and contradictory than such reasons: I need only have recourse to the Governor's letters and conversation to refute them. When he said that he was not informed of my arrival, he probably forgot that in the month of June he received a letter from Monsieur Jandanes, the Spanish minister at Philadelphia, which gave him intelligence of my expedition, and which he himself had made public: that two months after, not seeing me arrive, he mentioned on the parade, that probably the French officers who were travelling in the west of America were disgusted and had gone back by the Ohio. But supposing that my arrival had never been announced, this was no reason for arresting and confining me in a fortress. He must have been well persuaded that

two officers would not travel through a foreign country, without providing themselves with the necessary passports; and if he had any doubts, he ought to have made himself sure. I am sorry that I can offer no justification for the Governor's precipitation, which betrayed a kind of aversion for whatever bore the mark of the republic.

He says, indeed, that he had received different intelligence from Philadelphia, which recommended him to be on his guard respecting my journey; but if the Governor had been better instructed respecting the political situation of the United States, he would have known that there was a very violent struggle between those who are called the federalists and anti-federalists; that the first are the most determined enemies of the French republic, and that it was natural, when informed of my expedition, that they should employ, as they did, every means to prevent its success. The Governor was so convinced of this fact, that at the end of a private conversation on this subject, he could not help telling me in a fit of impatience, "I have been deceived, but he who has committed me shall pay for the whole."

The Governor presents a very futile motive for his conduct, in the assurance given him that I had made the survey of Louisiana hostile to his government; since this pretext has even less foundation than the two preceding.

He examined all my papers, as well as those of Adjutant General Warin, and found in my manuscripts nothing but observations which were favorable to the interests of his Catholic Majesty; in my draughts, a sketch of St. Lewis; and in my charts, the American part of the Illinois, on which only the right side of the Mississippi is traced.

I gave the Governor an explanation respecting the plan of St. Lewis, conformable to what Mr. Zeno Trudau, and Mr. Gayoso, Governor of the Natchez, had sent him.\*

\* During my stay at St. Lewis, conversing with Mr. Zeno Trudau on the importance of this post, in case of a war with England, I noticed to this officer, who was an active and intelligent person, the facility which this spot offered for the formation of an intrenched camp, by means of a single sluice. Mr. Trudau, anxious to communicate to his government whatever might be useful, requested me to give him the sketch on paper of my idea, in order to send it to the governor. Mr. Warin executed it immediately before Mr. Trudau, who requested me to convey it. When at the Natchez, I conversed with General Gayoso on the defence of Louisiana, and showed him a sketch of my plan respecting St. Lewis; he thought it so good, that he requested me to leave it with him: but as I was commissioned to give it to the governor-general, I observed to him that it was better for him to receive it from his hand than from mine. Mr. Gayoso wrote to the governor concerning it, in a letter dated the 15th of October, the eve of my departure, and of which the governor persisted in refusing to give me communication.

To the map of the Illinois the Governor had not the slightest right; yet notwithstanding his promise to restore me all my papers of every kind, he did not hesitate to keep it. It is vain for him to alledge that the right side of the Mississippi is traced on it; he knows perfectly well that it was only a single stroke taken from Hutchins's chart, to show the breadth of the river; but at least he had no right to take from it any other part than that belonging to Spain.

Did the Governor find likewise any part dependent on the territory of his Catholic Majesty in the course of the Ohio? or was he commissioned to hinder the French from taking any knowledge of the United States? It seemed to me astonishing that he should have been so scrupulous and severe to the French republicans, with respect to every thing that concerns Louisiana, whilst he was so extremely favorable towards other strangers, and particularly the English; by granting to a house of this nation, Messrs. Todd and Company, the exclusive fur trade of Upper Louisiana, on the right of the Mississippi. The Governor was no doubt ignorant that these persons were Canada agents belonging to the great Northern Company; that this Company was already in possession of all the sources of the river that empty their waters into the left of the Missouri; that this company had

gained over to its interests the greater part of the Indian nations inhabiting the whole of this part of the territory belonging to his Catholic Majesty, and thereby depriving his subjects of this branch of industry, had reduced them to want and misery.

With respect to the alarm which my presence excited, as was represented by the Governor, I own that I can scarcely credit it; especially when I recollect the multiplied marks of friendship and goodwill which I experienced during the time I spent in Louisiana, as well from the inhabitants as from the Spanish officers, who, not satisfied with treating us politely, gave me letters for their friends and relations at New Orleans, which letters I gave to the Governor, to the amount of forty. If he will have the goodness to produce them, his government and mine may easily judge the kind of inquietude which I occasioned. I every where met with persons who were attached to their ancient country, without ceasing, however, to entertain the most respectful sentiments for the government under which they lived.

The result of my expedition was so far from causing any alarm, my mission wore a character of wisdom and prudence so evident, and my labors were so favorable to the interests of the court of Spain, that the Governor was the first to suggest the means of putting my person and

my papers out of reach of the common enemy, by proposing to me a passport under a feigned name, and in causing the secret machinery to be made in which to conceal my papers.

I shall finish this account by rendering that justice to the Governor which he deserves; excepting my detention, he treated me with all the kindness and attention possible.

I should be happy in thinking that he was deceived, and I willingly forgive him the vexations he made me undergo at first, in favor of the civilities with which he afterwards treated me. Every man is liable to error, and particularly those who govern; for since it is impossible for them to see every thing with their own eyes, they are obliged to trust to those who surround them, and are often deceived.

## CHAPTER XXIV.

*Continuation of the description of the Mississippi.—Details respecting the sources of this river.—Nature of the lands on the western side.—Periodical inundations.—Its navigation.—Navigation of the Gulf of Mexico.—Winds which commonly prevail in these countries.—Recapitulation.*

THE sources of the Mississippi, according to the observations made by Mackenzie, are in the forty-seventh degree of northern latitude, one hundred and one longitude west of London, and about two degrees below the Lake of the Woods: they rise in a vast morass formed by a number of small lakes, the chief of which are called White Bear Lake and the Lake of the Marshes. The first, which is the most northerly from Upper Louisiana, is also the most considerable.

The direction of the Mississippi from its mouths to a small river, called Elk River, situated a little below that of Chepaway, is north and south; but at this point it makes a bend and runs north-west, parallel with the Missouri, from which it is separated by a space of an hundred or an hundred and twenty miles.

The Mississippi from its sources to St. Anthony's fall is only a large rivulet; but immediately after receiving the river St. Peter, it begins to be navigable, and takes a majestic course, which it maintains till it reaches the Gulf of Mexico, without any interruption from cataracts.

From St. Anthony's fall to the Missouri its current is gentle, and its waters always limpid.

In the whole of this space, which may be reckoned at a thousand and fifty miles, the Mississippi receives, among other rivers remarkable for the facility of their navigation for commerce, the Cold River, those of St. Peter, St. Croix, Chepaway, Ouseousin, Moins, and that of the Illinois.

Cold River flows from the east, and is separated only by a very small portage from one of the sources of the river St. Lewis, which throws its waters into Western Bay, making part of Lake Superior.

The river St. Peter comes from the north-west, and takes its rise near the river Asseniboine, which flows into the Lake Winnipick. It is by this river that the English

at Michillimackinac communicate with the Indian nations on the Upper Missouri, and particularly the Sioux.

The river St. Croix runs from the east, and is separated only by a portage nine miles from the river Goddard, which throws its waters into Lake Superior. The English going from Canada usually descend this river to reach that of St. Peter.

The river Chepaway comes from the west; its most northerly branch communicates by a small portage with Copper Mine River, which falls into Lake Superior. This river is but little frequented on account of the falls.

The river Ouiscousin flows also from the east, and is separated only by a morass of three miles, navigable even in high waters, from Fox River, which falls into Green Bay, forming part of Lake Michigan. The English take this road to reach Moins River.

This river is, next to that of St. Peter's, on the western side of the Mississippi, the most frequented by the English in their expeditions among the nations which dwell on the left side of the Lower Missouri. Its sources communicate with the Great River, the waters of which fall into the Missouri.

The most northerly branch of the river of the Illinois, called River of the Plains, is separated by a very small portage only from the river Chikago, which falls into the

lake Michigan. This is the great communication between Detroit and the Mississippi.

Thus all the great rivers of the Upper Mississippi,\* from St. Anthony's Falls to the Missouri, coming from the east, communicate with lake Superior and lake Michigan, and those flowing from the west with lake Winnipick and the waters of the Missouri.

At the sources of the Mississippi the nature of the country is a mixture of lakes and land drenched in water, which extends below the Lake of the Marsh. These lands are covered with long grass and underwood, and very rarely with trees. But from Marshy River to the mouths of the Mississippi, three classes of lands may be perfectly distinguished. The first, which includes those lying from Marshy River to the Missouri, forms an undulating country, covered with the finest woods and with natural meadows of vast extent, some of which exceed an hundred miles.

The quality of the land is superior to any hitherto known in North America, especially on the elevated plain which separates the waters of the Mississippi from those of the Missouri.†

\* By Upper Mississippi is understood the space from its springs to the Missouri.

† See the map of Upper Louisiana.

The second class stretches from the Missouri to the heights of Taïou Wapeti, near Cape Girardot. This is a broken country full of heights abounding in minerals; but on the other side of these heights the country is less hilly, and the soil richer and better watered.

The third class extends from the heights of Taïou Wapeti to New Orleans. This range of country is low, and often swampy for a greater or less space, in proportion to its distance from those heights. Towards the southwest these lands are all productive, and covered with great bamboos or cypress, to the distance of twenty-five or thirty miles from the river, where they begin to rise gradually into fine woods or natural meadows, equal in fertility to those which we have described in speaking of the Missouri; particularly on the river St. Francis, the White River, the Arkansas, the Red River, and the river of Wachita.

These lands, from the forty-seventh to the thirty-third degree, are fitted to receive the same cultivation as that of our northern departments; and from the thirty-third to the thirty-first, as that of our southern departments; from this degree to the mouths of the river, that is, to the twenty-ninth degree, the productions may be the same as those of our colonies.\*

\* See the chapter on agriculture.

The river begins to rise towards the end of December, and overflows in February, March, and April; in May and June it sinks to the level of its banks, and falls back into its bed; on the first days of July it begins to decrease, and continues to the end of August, which is the season when its waters are at the lowest.

In speaking of this river I have just observed, that its waters fall back into their bed, which places me in contradiction with several writers, some even academicians, who, like professional travellers, think they render themselves interesting in proportion to the extraordinary things they pretend to have seen, or the dangers they have incurred. Hence those gigantic descriptions and marvellous relations, exaggerated and fabulous, by which the reader is intimidated or deceived. In the list of these errors, is the assertion that the waters of the Mississippi, when once they have overflowed its banks, never return to their bed. The following circumstances have given rise to this false report.

It has been seen in the course of this expedition, that after having passed the heights of Tonicas, both sides of the Mississippi are only one vast alluvion, traversed by different great channels or mouths of the river. In the whole of this part, from New Orleans to Natchez, where

the country is more elevated, the waters which have gone out of their bed do not return, because the land on each side being lower than the banks of the river, and inclining to the east and west, their waters finding other channels, fall westward into the Bay of St. Bernard, and on the east into the lakes Pontchartrain and Maurepas. But from the Natchez to the Missouri, and even higher, where the river ceases to be without banks and expands into sheets, the waters which flow beyond their limits return again; because in ascending the river the country rises on each side, and the two chains of heights which we have described approach nearer the banks. The waters which find, on the contrary, a ground, the plane of which is inclined towards the Mississippi, are naturally thrown back into its bed, either by the rivers which flow into the Mississippi, or by the number of large defiles and creeks on each side: the whole of this volume of water discharges itself into the Gulf of Mexico, which is their common reservoir. These waters, therefore, are not lost in the land, and remain on them no more in the lower than in the upper part of the Mississippi, as has been so confidently asserted: in this movement of the waters, there is no extraordinary phenomenon; all is simple, as every thing which proceeds from the hand of nature.

The difficulties attending the navigation of the Mississippi have scarcely been better explained: these are great without doubt, but I am convinced that they have nothing more extraordinary than was common to great rivers in Europe before this portion of the world was inhabited; and the greater part of the accidents which have hitherto taken place, ought only to be attributed to ignorance or carelessness, and still more to avarice.

The seasons in which the greatest impediments to the navigation of the Mississippi occur, are those of its rise or fall; consequently in December, January, February, and in July and August; because in those seasons its current is much more rapid, and carries down a great quantity of drift-wood: but when its waters are in a kind of equilibrium, its current is very slow, and the greatest part of this wood floats down to the gulf, where it remains.

I had an opportunity of ascertaining the truth of these observations. The greater part of my boatmen having been attacked with the dysentery at Cape Girardot, and particularly the pilot, I was obliged to steer the boat myself as far as the Natchez, which is a distance of twelve hundred miles. I found, therefore, by experience, that the dangers and accidents so much talked of, are with

a little prudence, much attention, and a few general rules, reduced to nothing.

I shall here cite a few of these rules, in following which every traveller may place himself out of the reach of the most common accidents.

First, The most essential of all in descending the river is to take care at every bend to follow the hollow part, and avoid carefully the points as well as the channels formed by the islands; it is in these places that sand-banks and drift-wood accumulate. In the concave parts, the current is stronger, and does not suffer the floating wood to settle, and there is also a much greater depth of water.

Secondly, When the river, on the contrary, runs in a straight line, and its bed is intercepted by islands, which frequently happens, if doubtful what channel ought to be taken, you must cease to row or steer a mile before you reach the island, and leave the boat to the current, which infallibly carries it into its proper course. Multiplied experiments convinced me of this fact.

Thirdly, What is most dangerous and has occasioned the loss of so many boats, especially of those with which the Americans navigate the Ohio and the Mississippi to New Orleans, are the Sawyers, called by the Canadians *Chicots*. These are great trees, of which the roots are fixed to the bed of the river, or to other trees, while the

higher branches rise above the water, and are beaten by the stream. There is nothing more easy than to avoid these trees; with a little attention they may be always seen at a considerable distance, either by their appearance above water, or by the breakers which they form when under water.. If the stream, in running from the left to the right, should drive upon the *chicot*, care must be taken not to persist in passing above, but, on the contrary, to yield to the current, and pass below, that is, on the right, leaving the *chicot* on the left. By taking such precautions, these obstacles may always be avoided: the Americans, however, not only neglect to steer their boats in these long voyages, but their excessive economy leads them to continue their route during the night as well as the day, by which means a great number are lost: from these circumstances, the navigation of this river is reckoned dangerous, although it is very seldom that any such accidents happen to boats manned by Canadians.

With respect to ascending the Mississippi, the most favorable season, as we have already observed, is when the river is very high or quite low. In the first case, as there is abundance of water in every part, and the boat is not driven by the stream, none of the inconveniences are to be apprehended which are met with in descending the river. In the second case, the inverse direction of

that which we have pointed out in descending ought to be followed; the concave parts must here be avoided by keeping close to the points, because on this side the stream is less rapid, and these points sometimes offer convenient banks four or five miles in extent, where the towing line may be used.

We have already remarked, that within these twenty years these impediments have very perceptibly diminished. These changes have justly been attributed to the immense numbers which since the peace resort to the Ohio and the parts adjacent, both sides of which are cleared and peopled with very great rapidity.

There is no doubt, therefore, that in proportion as all the great rivers tributary to the Mississippi, especially the Missouri, become inhabited, a part of these obstacles will diminish; because it is the vast forests which attract the clouds, and keep up the constant humidity that feeds the small rivulets. It has been remarked, that beyond the Alleghanies a much greater quantity of rain falls, one year with another, than on this side of the mountains, where vast plains have been cleared and cultivated. When the same circumstance shall take place with respect to the Western States, the rains will be less frequent, and the greater part of the rivulets will be dried up; the rivers

thus furnishing less water to the Mississippi, its inundations will diminish progressively.

By means of the clearings, the banks of the rivers being no longer covered with trees, these immense quantities of drift-wood will disappear, and the Mississippi, the Ohio, and the Missouri will become as free from embarrassments as Hudson's River, the Delaware, and the Potomac, which certainly presented the same inconveniences when visited for the first time by civilised men.

Before we leave this subject, we shall make a few observations respecting the navigation of the Gulf of Mexico; the difficulties and dangers of which have been also represented as one of the great inconveniences which would necessarily form an obstacle to the prosperity of this part of the continent. This opinion has been entertained by men whose talents and public character so justly command respect and admiration; by Mr. Jefferson, for instance, in his work on Virginia.

What renders the navigation of the gulf of Mexico difficult and dangerous, are the currents; but it is proper to state in what part of the gulf they are really dangerous.

Below the twenty-seventh degree, the currents flow into the gulf; above this latitude, they flow out. The further we penetrate into the gulf, after passing the

twenty-seventh degree, the greater variation is found in the direction of the currents, a variation sometimes every twenty-four hours. In this part, the navigation is very dangerous, because no practice can establish certain rules. This is so true, that when a vessel, coming from the bottom of the gulf, has passed the twenty-seventh degree, the seaman regards his voyage as completed, and considers himself as out of all danger.

Above the twenty-seventh degree, as I have just observed, the currents flow outwards, but with this difference, that they never vary. At the twenty-ninth degree, near the mouths of the Mississippi, the currents run from east to west; that is, the waters of the rivers divide, half in the bay St. Bernard, and the other half in Pensacola, but this lasts only during the time of the soundings, after which the currents run straight upon the channel of Bahama.

But as vessels never go out from the river except with steady winds, and even if they should be becalmed, good anchorage is every where found, there is not the slightest danger of being thrown either on Pensacola or into the bay of St. Bernard; so that no accidents take place but below the twenty-seventh degree.

With respect to the winds that prevail in the valley the Mississippi, the observations which we made day by

day agree with the information we received from the most experienced pilots.

The winds on the Ohio are in general variable; but it is, however, to be observed, that they blow more commonly from the south than the north, and very rarely from the north-east.

The south-easterly winds are very common during the summer, and always bring rain or thick fogs.

The south-west is very clear and hot; the wind from the south brings hurricanes.

In Upper Louisiana, towards the Illinois, and above, the westerly winds produce storms, which follow the chain of heights that border the river and run towards the south-south-west.

The winds on the Missouri blow eleven months in the year from the north-west, and are most powerful in the vicinity of the Yellow mountains. Towards noon, they sometimes rush with such violence that the navigator is obliged to land; the wind, however, falls as the sun goes down.

In Lower Louisiana, below the thirty-third degree, from the month of November to that of March, the north-north-west and north-east winds prevail. Sometimes the winds turn to the south, but never more than for twenty-four hours, when they are always fol-

lowed by rain; they afterwards constantly return to the north-west.

April, May, and June, are remarkable for calms and great droughts. July, August, and September, are, as in the islands, the season of winds, which blow from every point of the compass; the winds, except at this period, blow always from the south-west.

It is in August that hurricanes take place; they commonly begin in the north-north-east, blow at first with violence for a few hours, after which there is a dead calm which lasts a few minutes; the winds then pass to the south-south-west, rage with fury, and drive the water upon the land more than six feet above its banks; but these hurricanes are never felt inland, I mean those of this direction, beyond the thirtieth degree. When these blasts are accompanied with thunder, there is nothing to fear from the hurricane.

The natural monuments of Upper and Lower Louisiana are evidences of the antiquity of these countries; Lower Louisiana, from the immense quantity of earthy dépôts which have been carried down by the Mississippi; Upper Louisiana, from the arrangement of the layers of earth, the traces of vegetables and animals found at different depths, the high tracks of meadow ground along

the elevated plains which separate Louisiana from New Mexico, where are still seen scattered rocks which seem to be the wrecks, or rather the most elevated points, of a chain of mountains which exist no longer, because the waters have covered them again with their mud.

With respect to the fictitious monuments of which certain travellers have given such magnificent descriptions, the most numerous are the mounds of different heights, which have served as fortresses to the Indian nations, and which are called *Mammelles*. These mounds are scattered in all directions; and in digging are found stone hatchets, tomahawks, and earthen vessels, some of which are still whole. Tombs, consisting of stones heaped together, are sometimes met with; and it is said, that at no great distance from fort St. Charles, in the country of the Illinois, there are others of hewn stone; and that in the same place is a beautiful grotto in a rock. In other places, we were assured that there are traces of buildings of hewn stone of an enormous size; but we saw nothing of this kind, nor any of those characters which have been mentioned, and which, it is said, have no resemblance with any writing hitherto known.

What is called Palissa is the figure of a great imaginary animal, which the Indians have rudely depicted in red,

in the slope of a great rock on the eastern side of the Mississippi, near the river of the Illinois. The subterraneous grottos, of which travellers have recounted so many extraordinary things, are caverns hollowed by the waters, and in which strong concretions have been formed. The mud that is deposited in these cavities receives the marks of the feet of animals, which, remaining in this layer, petrify and become homogeneous with the rock. These grottos are very numerous. In the river of the Arkansas is a great rock, called the Sugar Loaf, around the base of which are several of those cavities. There are others on the banks of the rivers, into which canoes can enter. Some of these caverns, it is said, are so deep, that it requires an hour's walking to reach the end; others pierce even the mountains. It has been asserted that there are rocks cut perpendicularly, with crannies in the top; but this is a fable: for these rocks have been formed by the currents of water, the cuttings have been made by the falling down of the earth, and those crannies are only the protruding parts which the waters could not reach.

I shall not close these observations like the greater part of travellers, whose presumption leads them to believe that they have seen, done, and said every thing. I will

frankly acknowledge, on the contrary, that this work is very incomplete, because the countries which we had traversed were immense; that to examine them in detail required as many years as we employed months, and as much facility as we found obstacles.

But we may be permitted to observe, notwithstanding the multiplied imperfections of this work, that if the critical period in which we undertook it be considered; if we reflect that we had to struggle against the jealousy and hatred of the federalists and English; to excite no uneasiness in the Spanish government, which the behaviour of a few vagabonds that had preceded us in the same route, but with perfidious views, had too well justified; if it be recollected that we were watched and surrounded by spies and assassins, and even arrested; we may venture to hope that this series of observations will merit some attention, especially if, as we trust, it should be an incitement in others to complete it. It was necessary, also, to brave other perils: but a true Frenchman is unacquainted with danger when any service is to be rendered his country.

As a supplement to the information we have gathered respecting these countries, we shall treat in general of its productions, woods, commerce, policy, limits, as well

as the frontiers which we presume ought one day to serve as a barrier between the Atlantic and Western States; these are important objects, and for the better information of the reader we have classed them in the following chapters.



## CHAPTER XXV.

*Productions of Louisiana.—Timber.—Errors in Europe respecting the timber in the United States.—State of Louisiana and the Floridas. — Inferior quality of the woods in the north. —The woods of the west preferable.—Timber for building.—Green oak.—White and black oak.—Cedars.—Cypress.—Pines. —Flms.—Other sorts of wood.—Cayenne wood.—Other spontaneous productions of Louisiana.*

As the productions of the earth are the first, we might even say, the only elements of commerce, it is with these that I shall begin this chapter.

It is well known that the forests of the Baltic, which for so long a time supplied the whole marine of Europe, are beginning to be exhausted ; that this state of consumption will naturally increase the price of timber ; and

that England, in order to obtain what she wants, has considerable advantages over the rest of the maritime powers.

It is generally believed in Europe that the continent of America, and by the continent is understood the United States, can, by means of its vast forests, supply the marine of Europe with timber, when it can no longer be found in the forests of the north. The enormous difference between the population of the United States and the extent of their territory, is no doubt the foundation of this opinion.

But the consumption of wood is immense in the United States; the new clearings in which the wood is almost always burnt; the construction of American vessels, which consumes so much the more, as these vessels last a much shorter time than those of Europe; their buildings; the fences which inclose fields from one end of the continent to the other; in short, the waste of every kind made by an improvident people, have destroyed such a quantity of wood, that scarcely any is to be found within an hundred miles of the sea, or near navigable rivers. Fire wood is dearer in the towns of America than in those of Europe. Excepting in the forests of South Carolina and Georgia, the timber, independently of its doubtful quality for the construction of vessels, is not of sufficient growth

for great ships; in Georgia even, the builders for the United States found with difficulty green oak of sufficient size to build the six frigates which Congress had decreed three years before; in short, the little that had escaped the general devastation has lately been purchased by the federal government. These facts, known by all those who are acquainted with the United States, are convincing proofs that the hope entertained in Europe of finding great resources here for its naval constructions is altogether erroneous.

But the resources which are no longer to be found in the territory of the United States, are met with in abundance in the forests of Louisiana and the Floridas. The great fertility of the soil produces timber of the finest kinds and the largest dimensions; and as these immense countries are almost all uninhabited, and as Spain has hitherto extracted but little timber, we may consider the forests as untouched, or at least as offering resources which will not be exhausted for a long series of years.

There are, however, in North America and towards Hudson's Bay, some forests which no doubt are yet untouched: but although they may furnish a certain portion of wood fit for building, it is only in very small quantities. It has generally been observed, that, in the northern

latitudes, the forests are so thickly peopled with trees as to hinder the circulation of the air and keep the ground in a continual state of humidity, which prevents the trees from rising beyond a certain height, or of keeping such under as injure their growth. Their humidity also renders the sap watery and easy of fermentation, on which account the timber is very liable to rottenness.

This is not the case in the more southerly latitudes, such as the banks of the Missouri, the Arkansas, St. Francis, the Osages, Yazoo, Ibberville, the Red River, the Washites, the Mobile, and throughout the whole country to the west of the Mississippi.

The ground there imbibes the waters which it receives, without retaining them on its surface, as in the north. Fed by a more substantial sap, the trees rise with force and quickness sufficient to disengage themselves from such as would hinder their growth; the air circulates around them, and aids their vegetation, their force, and their beauty. These forests are less peopled with trees; but those which grow there are fine, tall, straight, and of proper dimensions. Their sap is oily, which renders their fibres hard and compact, and preserves them from the rottenness so common in the forests of the north. Under these lofty trees the ground is often covered with

rich and thick herbage. Such in general are the forests of these countries, the immense extent of which may, however, give room to some exceptions.

The most valuable wood for naval constructions which grows in the Floridas and in Louisiana, is the green oak, the white and black oak, the red cedar, the pine and elm.

The green oak grows in East Florida, on the Mobile, the Washites, the Red River, and the Yazoo, on the Attacapas, and in the vicinity of New Orleans, where it is in great abundance; but this tree is not found above the thirty-first degree, or at least the small number beyond this latitude are stunted and of bad growth.

The quality of the green oak, its solidity and duration, are generally known. The vessels which are constructed with this wood, are of long duration. A remarkable and authentic instance will confirm the opinion which has been formed respecting the firmness of this timber. When the English in the last war were desirous of fortifying Pensacola, they were obliged to destroy a small fort built of green oak, erected in 1680 by the French, at the time of their first settlement. They found the wood as sound and untouched in all its parts, as if it had been cut the preceding day, and the whole without any waste was employed in forming the new intrenchment.

This fact was related by an English engineer charged with the construction of that work.

A piece of green oak, thirty feet long and thirty-four inches square, costs the King of Spain four livres the foot, delivered at New Orleans. Mr. Serile, master builder in the service of Spain, a man of considerable talents and reputation in his line of business, attributes this dearness to the want of hands; he asserts that he could reduce this price a third, if he could dispose of a few sailors to make trains.

The white and black oak grow throughout the whole continent of Upper Louisiana; these are in several parts thinly planted and lofty.

The custom of the Indian hunters of setting fire in the spring to the leaves which have fallen in the winter, and to the shoots, contributes, with the nature of the soil, to the insulated growth of the trees; and in those parts which are burnt, the trees are much more distant from each other. There are also vast natural meadows in which there are no trees, and which are covered with a long, thick, and rich herbage. This almost total absence of trees, in parts so extensive and in a soil so rich, can be attributed only to the fires made by the Indians, to which they often can neither give the direction nor the limits they wish;

and who, indeed, embarrass themselves very little respecting the greater or less extent of ground which is consumed. But it results from these frequent glades in the midst of these forests, that the trees which border them being more exposed, receive from the impulsion of the wind a curved form, which renders them still more fit for that part in the construction of vessels for which they are employed.

Mr. Serile asserts, that these kinds of oaks are preferable to those of Europe for ribs, knees, and curbs.

The cedar grows on the banks of the Missouri and the rivers Plate and Arkansas. It is of a reddish marble color, and almost always of fine dimensions; the quality of its timber is good, though inferior to that of Cuba, being more brittle.

The cypress grows on both sides the Mississippi, from its mouth to the river Arkansas, and in all the marshy grounds of these latitudes. This tree rises above seventy feet on a diameter of eighteen or twenty-four inches; its trunk is straight and without knots. The Spaniards use them for masts; they are less serviceable for yards, because as these terminate almost in a point, the heart of the tree, more porous, is exposed, and the piece is liable to break at its end. The cypress contains a great quantity

of soft substance between the bark and the wood, but as the trees are large, there still remains, after taking away the imperfect part, a thickness of good wood greater than the proportions requisite for the use in which it is employed.\* The cypress plank, ten feet long, a foot wide, and an inch in thickness, sells at New Orleans only for twenty-four or twenty-five sous tournois.

The pine grows very generally through the whole of Louisiana; those on the Red River, the White River, and the Arkansas are of the greatest height, straight, and without knots: they have the same elasticity as those of Riga, only they are more heavy and less liable to break than the cypress, and can be more easily repaired; the cypress, however, lasts longer than the pine.

The pine in the Illinois and in the Missouri is less tall, more knotty, and the wood is drier than those above-mentioned. The price of a pine, coming from the Red River, the White River, and the Arkansas, and delivered at New Orleans, is a piastre the foot; hitherto none have been extracted from the Illinois for the Spanish marine.

The elm grows also in almost every part of Louisiana:

\* The principal defect of the cypress is being too heavy; the Spaniards employ it only in the construction of their first-rate vessels.

its wood is used for pullies, pumps, carriages for cannon, and every kind of wheelwright's work; but that which grows on heights and in light grounds is the best.

Nearly the same kinds of wood are without doubt found in every part of the United States bordering on the Mississippi, as in the Spanish possessions on the same river; but these parts, from their population and the clearings which are made, are in every respect superior to those of Spain, and consequently are exposed to the same degradation as the other parts of the States nearer the sea. Besides, if ever this timber should become useful for the marine belonging to the power which should have possession of New Orleans, it cannot be obtained without purchase; and whether it be employed by this marine, or any other in Europe, it can have no other outlet than the Mississippi, which is the common receptacle, together with the Ohio, of all the rivers by which this wood can be transported.

Independently of this ship timber, which is the most precious and essential for a great naval power, Louisiana produces an immense quantity of other kinds of wood, which though not of so great a value as the last, are not less useful and important. Of this secondary class are five or six different kinds of walnut-trees, the black and white mulberry, the apple-tree, pear, plumb, cherry-tree, the

ash, the willow of different kinds, the thorn, poplar, beech, sassafras, the acacia of various sorts, the plane, laurel, fir, fig-tree, pomegranate, peach, chesnut, orange, lemon, olive-tree, and a variety of others which it would take too long to enumerate. Trees of an unknown species are every day discovered in the territory of the United States; and it cannot be doubted that the forests of Louisiana, much better wooded and more extensive, contain a considerable number, which will be discovered in proportion as they are explored, and which will furnish new resources both for the wants and arts of life.

But without pretending to indulge in any fancied speculations with respect to the time when such discoveries shall take place, the wood already known in Louisiana, of which a part has already been enumerated, offers immense and necessary resources for the annual consumption of the western colonies. In this province may be found every kind of timber fit for building, wood for the covering of houses, staves, and all kinds of resins: these various objects, so necessary for the colonies, are of a quality infinitely superior to those which the United States can furnish; the conveyance is more quick and certain; and free of those expenses which must always be expected from the charges of foreign merchants.

Much has been said of the wood of Cayenne; if it be true that this country produces timber fit for the construction of vessels, it must be in small quantities, and would require much attention in the choice. Professional men who are acquainted with the forests in the regions of the torrid zone, know that a great part of the wood which is there produced is generally of a weak, lax fibre, and what is called soft, that is, which a few weeks after the trees are felled, crumble into a kind of rotten dust, while those of the incorruptible species are found too heavy, and not sufficiently flexible.

The other spontaneous productions of Louisiana are numberless and of every kind. Nature seems as prodigal to the west of the Mississippi as she is sterile from the Atlantic to the east of this river. In Upper Louisiana are found greystone, millstone, silix, marbles, gypsum, pyrites, and pumice stone. In the country from the river St. Peter to the Natchez are salt springs, lead and iron mines, coal, and slate quarries in abundance. In the higher parts of the Osages and the Arkansas, are salt rocks of the finest crystallization. It is stated as a fact, that in the mountains known by the name of the Yellow Mountains, forming the separation of the waters of the Mississippi and the Southern Ocean, there are mines both of tin and copper.

If in these countries, hitherto so little frequented, valuable fossils are found in so great an abundance, there can be no doubt but that a much greater quantity will be discovered when the necessary means for making such researches shall be put into execution.

## CHAPTER XXVI.

*Of the productions arising from cultivation.—Disproportion of territory with population.—Agriculture in a languishing state.—Exportation.—Cultivation of indigenous productions.—Fruit trees.—Vine.—Cultivation in Lower Louisiana.—Observations.—Indigo abandoned.—Inferior quality of cotton.—Sugar canes.—Detail of a sugar plantation.—Canes of Otaheite preferable to those of Batavia.—Success of Mr. Bore.—Other productions.—Low price of cattle.*

WHEREVER population is in disproportion with the lands which remain uncultivated, the cultivation must necessarily be limited and imperfect. This is evident from the state of Upper Louisiana, the soil of which, in general good and new, produces abundantly with the slightest labor.

Indolence, or rather that love of repose which is natural to men living in hot climates, does not suffer the inhabitants of Upper Louisiana to reap from their lands all the advantages which commonly result from industry stimulated by interest. The measure of their toil is that of their wants, which when limited to what is necessary are soon satisfied: every kind of cultivation extending beyond this point, would appear to them so much the more useless, as the objects of exchange are few in number, and because commerce, which produces new wants, and gives fresh springs to industry, is almost extinct in Upper Louisiana. Agriculture has also other obstacles to contend with: the rivers which traverse these countries abound in fish; the forests are stocked with game, and afford the inhabitants the easiest means of supplying their wants; besides a great number trade with the Indians, and the greater part among them, fond of roving, undertake very distant expeditions.

Although the state of agriculture be not very flourishing, more, however, is produced than is necessary for the consumption of the inhabitants. Louisiana exported in the year 1795 three thousand five hundred barrels of flour, at four piastres the hundred weight, and twenty-one thousand measures of maize, from the territory of Saint Lewis: two thousand nine hundred barrels of flour at the

same price, and thirteen thousand measures of maize from St. Geneviève; seven thousand barrels of flour, and thirty-five thousand measures of maize, from Anse à la Graisse.\* The Illinois territory belonging to the United States furnished, in the same year, three thousand barrels of flour and thirty thousand measures of maize. This flour is indeed inferior to that of the United States, owing to the imperfection of the corn mills.

It is also to be observed, that the Arkansas and the Chawanons, two Indian nations, the first inhabiting the banks of the river of that name, and the second the west of the Mississippi, thirty leagues from Cape Girardot, increase, by the produce of their cultivation, the exportation of which I have just spoken.

In Upper Louisiana are also grown rye, oats, peas, flax, hemp and potatoes. Though this last root comes originally from Europe, wild potatoes are found through the whole extent of the Illinois: these potatoes are small, and of a sour taste; but by cultivation they become both larger and palatable.

Fruit trees are very abundant in Upper Louisiana; in this country, originally inhabited by the French, and which has continued to be so by their descendants,

\* New Madrid.

the trees of Europe have been planted, and cultivated with care. Apples, pears, and nuts are good, and in so great plenty, that quantities are sent to New Orleans, and even to the Havannah.

This country produces naturally trees and plants which may be perfected by cultivation. It is a rich soil, and varies in its productions; the riches which it contains would readily unfold themselves to the researches of human industry.

In this astonishing variety of production, the vine is also to be numbered, with which the country is covered; but it is the wild vine, and few experiments have been made to cultivate it with success. This plant appeared to me altogether different from that which I saw in North America: its stalk was not more than two feet and an half or three feet in length; it grows most frequently in rocky and stony places, and is found always in clumps,\* resembling, in its foliage and appearance, the vine of Madeira or Champagne; the grape is black, small, and very sweet. There is no doubt but this vine would increase both in size and quality by cultivation. A French-

\* This vine is of the same kind as that we found on the Ohio, near Cumberland River, and which we have mentioned in the course of this work.

man planted several cuttings in his garden ; in three years time the fruit became much larger and more abundant ; and probably his experiment would have succeeded better, if instead of letting them grow in clumps, he had separated the stalks, shortened and supported them with sticks. But the nature of the soil, the temperature of the climate, the quality of the fruit, even wild, and the experiment, though imperfect, leave no doubt that this vine, well cultivated, would produce fine grapes, and that good sets brought from Europe might also be cultivated with great success.

Cultivation is already more prosperous in Lower than in Upper Louisiana, and will continue to augment in proportion to the increase of the population, and the encouragement given to the industry of the inhabitants by foreign markets.

I ought to remark, that between the last settlements of Upper Louisiana and the first in Lower Louisiana, that is, from the river Saline to the Natchez, there is a space of nearly seven or eight degrees of latitude, where scarcely any human traces are to be seen, and which present to the eye of the traveller, on the Spanish side, nothing but a few wretched huts belonging to hunters. This space, however, is covered with the richest lands, the finest woods, and watered by numerous navigable rivers.

The difference of climate between Upper and Lower Louisiana, and the heat which prevails in this last country, admit the cultivation of productions which cannot ripen in the latitudes of Upper Louisiana.

Indigo has long been cultivated, and though very inferior to that of Guatinala and the Antilles, is preferable to that of Georgia and the Carolinas. The harvests, however, are very precarious, because this plant requires a dry soil ; while the indigos planted in Lower Louisiana, which is overflowed almost every year, often perish before they ripen. Independently of the variety of accidents which render the cultivation of this plant very hazardous in the country where the indigo grows, the root of that of Louisiana is liable to be pricked by a small worm, which, from the extreme humidity of the ground, abounds in this part and destroys the plant. The harvests have been known to fail two or three years successively ; this misfortune happened in 1794, and no indigo was made on any plantation. The low price of the indigo of Louisiana in the European markets, especially since India furnishes this article in such large quantities and so rich in quality, does not indemnify the planters of indigo for their expenses and the frequent failure of their harvests. It is on this account that they have entirely abandoned the cultivation of that plant ; and in Louisiana

I saw the indigo works in ruins, and the planters reduced to growing maize and yams, sawing planks with mills which they had built, and framing timber for houses, which they send to the Havannah and the Islands, preferring the very moderate gain which they reap from this hard labor, to the uncertain and continually decreasing profits to be obtained by the cultivation of indigo.

Cotton is cultivated with success in Louisiana; its wool is as fine and as white as that of the Antilles, but shorter. One of the causes which contribute to disgust the inhabitants with this cultivation is, that it is laborious, and employs a great number of hands; that the cotton tree, which in the Antilles resists the temperature three years, perishes in Louisiana from the rigor of the winters, though they are of short duration, if they be not replanted every year. The adhesion of the grain to the cotton requires great care and a considerable time to separate it, and the coarse kind of mill which is used for this operation, shortens still more the cotton wool, and renders it inferior in value, in the markets of Europe, to the cotton of Surinam, Cayenne, the West Indian Islands, and the Indies.

Nevertheless, we are led to think that the cotton planters of Louisiana, more enlightened and prudent, will not abandon the cultivation of this article, which, if

it requires care, will in return yield certain harvests, and which, except what regards the preparation of the soil, may be confided to children. With respect to the adhesion of the grains of cotton, this depends altogether on the kind of seed which is employed, the choice of which may be taught by experience.

The same inconveniences attending the separation of the cotton in Louisiana, are found in Georgia and Carolina. The mills, coarsely made and ill combined, broke and shortened the wool so much, that the value was diminished a quarter: a better machine has lately been introduced into the United States, which is no doubt susceptible of greater perfection, and the cotton has already resumed its old price. It is, therefore, to be hoped, that the industry of the Louisiana cotton planters will be duly excited, and that, if encouraged by a proper attention on the part of government, to commerce and agriculture, and instructed by the experience of others, they will find the means of carrying to its highest perfection a produce of so much importance, and for which there is so great a demand.

The sugar cane is at present the most favored object of culture in Lower Louisiana; it is natural to the country, but the attempts which have been made at different periods to ameliorate its growth have been aban-

done. Louisiana, from the neglect of the indigo grounds, and the discouragement of the cotton planters, was reduced to great distress, when Mr. Bore, an old French inhabitant, distinguished as much for his attachment to his ancient country as the activity of his genius, undertook, contrary to the opinion of the whole colony, to re-establish the cultivation of the sugar cane.

It was towards the end of October that I visited Mr. Bore's\* plantation. He was then employed in cutting the canes which had been planted the beginning of February, as at St. Domingo, but closer to each other, at least so it appeared to me, than in the Antilles. I found them still green, the knots at very small distances, and the stalks slender. Notwithstanding this state of unripeness, he was rolling, that is, pressing the canes in the mill. This mill, like those of St. Domingo, is turned by five mules: the juice was of a green color, contained a considerable quantity of acid, and was evaporated in six boilers of unequal size, the only instruments of this kind Mr. Bore could find in the colony. The syrop, less yellow than that of the Antilles, was

\* It was at the house of this respectable citizen that I was arrested by order of the Governor of Louisiana, as I have already related.

sweet and good. The pale color sometimes observed in the syrops at St. Domingo, is attributed to the drought, and sometimes also to the excessive humidity of the season during the growth of the sugar cane. In Louisiana, this paleness must proceed chiefly from the imperfect ripeness of the cane, which on account of the winter can remain only nine months in the earth; whilst in the Antilles, where this plant is continually exposed to a burning sun, the planters never think it ripe but at the end of thirteen, fourteen, and fifteen months. From the great quantity of acid and watery particles it contains, the sugar of Louisiana loses much more by evaporation, and crystallizes with more difficulty than in the Antilles.

The moist sugars in Mr. Bore's plantation are good, crystallise well, and have a rich grain; but they still contain a thick watery matter, which cannot be totally purified by evaporation.

The raw sugar is of the first quality, and such was the opinion of the planters to whom I showed samples. It has so much body, that some of them thought it had been refined. This perfection is a proof of the extreme fertility of the soil, and of its necessary properties for the nourishment of the plant. The only

difficulty is to select the kind of cane which will soonest ripen.

Experiments had been made in St. Domingo, previous to the revolution, on the sugar cane of Batavia; the small number of planters by whom it had been cultivated, found it superior to the common cane, from the certainty as well as abundance of its produce. These experiments were interrupted by the troubles which took place in the colony, and it is therefore difficult to lay down any sure data. We are ignorant of what it would be highly interesting for Louisiana to ascertain, whether in the space of nine months it can attain a sufficient degree of maturity.

At Guadaloupe, in the English colonies, and particularly at Antigua, the cane of Otaheite is cultivated. This cane has been introduced only within four years, and its advantages over the common cane are various; it ripens in ten months instead of fourteen; in dry seasons, when the common cane cannot shoot, the cane of Otaheite is not retarded in its growth; it flourishes in fen lands, where the common cane cannot grow; the cane of Otaheite gives more juice than the common cane, and from an equal quantity yields more sugar, which is of the finest color. The only disadvantage of this cane, compared with the other, is, that its wood is not

so fit to heat the coppers, and that it considerably impoverishes the ground; but these inconveniences are slight for a soil so fertile and so rich in wood as Louisiana. The superiority of this cane has been so well ascertained in Antigua, that no other is at present cultivated; it is also very general in the English colonies, especially in Jamaica; and vessels freighted only with this plant have been constantly sent from Antigua to this last colony within these two years, in spite of the dangers of the war. It is highly probable that the cultivation of this cane would very well suit the soil and climate of Lower Louisiana; but time and successive experiments, aided by the light thrown on this subject by well instructed boards of administration, and scientific men in Europe, can alone determine definitively the choice of the inhabitants, who, encouraged by Mr. Bore's success, seem much prejudiced in favor of this species of cultivation. There is, however, so great a want of refiners in Lower Louisiana, that the only workman in the colony, and who is in Mr. Bore's service, refines for other planters when his master's work is finished. It is scarcely necessary to observe, how much sugar must be lost from the want of this class of workmen.

Mr. Bore thinks that the success of his plantation is owing to the care he takes to convey the waters of the

Mississippi into his grounds, by means of sluices which he opens and shuts at pleasure. These irrigations keep the grounds constantly moist in the months of March, April, and May, which are the seasons of the great droughts in Louisiana, and which Mr. Bore has found to be extremely hurtful to the growth of the canes. This mode is practised in almost every plantation, the nature and position of the grounds fitted for sugar being nearly every where the same in Lower Louisiana, and the waters of the Mississippi rising regularly from March to July.

The sugar cane which Mr. Bore cultivates, and which is the common cane of the country, yields only from eight to nine hundred weight of moist sugar per acre; while the same extent of ground in St. Domingo produces from twenty-five hundred to three thousand weight. This difference arises, as I have already observed, from the great evaporation.

His establishment, which consists of a mill, stove, outhouse, the whole built with brick and covered with tiles, including the cylinder and boilers, cost him only four thousand piastres. It is true, that in these buildings he employed his negroes, women as well as men, the number of whom was forty. It must also be observed, that the bricks, tiles, and lime, were found on his estate; that the carpenter's work was made at home; and that

the construction of the whole was the labor of eighteen months. This expense will appear, no doubt, very trifling for so large and important a manufactory. At St. Domingo, such an establishment would have cost two hundred thousand livres.

The produce of Mr. Bore's establishment amounted to twelve thousand piastres; and he employed only forty negroes, men and women, having no greater number: a very considerable part of his canes, therefore, were left to rot, for want of hands to gather them.

A longer abode at Mr. Bore's would, as I have already observed, have yielded me more information: there were, however, several important questions which he confessed he was not prepared to answer, being still but a novice in this kind of cultivation. Long experience, the comparison of the produce of several years, the observation of the influence of different seasons on the different kinds of culture, on the various sorts of canes, the most economical mode of labor, and the comparison of the expenses with the profits, could alone give these questions a satisfactory solution.

But one fact of great importance is ascertained;—that the soil of Lower Louisiana is fitted for the growth of the sugar cane, that it is capable of producing fine and good sugar, that such sugar is actually produced, and

in as great a quantity as is possible, considering the number of hands employed.\*

Maize and oats are also grown in Lower Louisiana, and all kinds of produce may be cultivated with success, whenever sufficient encouragement is given by a sure market, which can arise only from an active trade.

Great quantities of rice grows in the swamps belonging to almost every habitation in Lower Louisiana. Tobacco is also an article of produce, particularly in the Nattshi-loches, at Pointe Coupée and the Natchez. The first of these settlements furnishes tobacco of the best quality, esteemed the finest and most valuable for the market. Two millions weight are exported annually. In the other settlements the tobacco is good, but inferior; for which reason less is grown.

Pomegranates, lemons, oranges, and olives, ripen in the sun of Lower Louisiana; the heat of which, however, is not so great as to prevent the whites from working the ground, which takes place in the Two Parishes of the Accadians and Germans, both of which settlements are the oldest and most considerable in Lower Louisiana. These spots are in latitude 29.<sup>o</sup> 55." but the inha-

\* In 1796 there were two sugar plantations; at present there are upwards of two hundred.

bitants work like those in the most temperate European climates ; few negroes are seen in these establishments, and still fewer in Upper Louisiana, where the whites work as in Europe.

Amongst the numerous advantages arising from this colony to a government which should place a due value on agriculture and industry, the multitude of cattle in certain parts of Lower Louisiana might hold the first rank. The settlements which are more particularly productive are the Attacapas, the Apelousas, Baratarias, Chitamachas, and the Wachitas, all of which are on the right side of the Mississippi. The droves of cattle are so considerable in these countries, that few of the inhabitants are acquainted with the riches they possess. The current price of a bullock is four piastres, and from six to eight piastres that of a horse.

## CHAPTER XXVIII.

*Fur trade—Places most convenient for this commerce—The English in sole possession of this trade — Great importance of Canada to the English—Benefits arising from the fur trade—Total failure of this branch of commerce to the merchants of Louisiana—Exclusive privileges obtained by the English—Their persevering activity—Roads by which they trade—Monopoly of the trade of Florida—Forts on the Spanish territory belonging to the English — Advantages of New Orleans—Reflections — Erroneous opinions respecting the fur trade — Philadelphia and Baltimore ruined by the trade of New Orleans.*

THE immense territory to the north of the great lakes of America, and to the westward of the Mississippi, bounded by the Frozen Sea and the Pacific Ocean, is the region which has so long and so abundantly supported the fur trade. The articles of this commerce had also been long

supplied by those countries which border on Canada, and nearer to the Atlantic; but in proportion as the Europeans removed their settlements farther from the coasts, the fur animals retreated; and the Indian nations, driven by force, or under the influence of terror, soon followed their example. A few, indeed, to the south of the great lakes and east of the Mississippi, yet remain; but these are so circumscribed in their possessions that scarcely any can subsist by hunting. The existence of the whole is extremely precarious; and although a few of these tribes may from time to time trade for skins of bears and roebucks, they cannot be considered as contributing to what may properly be called the fur-trade. The resources of this branch of commerce are, therefore, found at present beyond the great lakes and to the west of the Mississippi.

I shall confine myself, in this chapter, to that part which is contained within the limits of Louisiana.

The trade which is actually carried on belongs almost exclusively to English companies; that is, to England: since the English manufactories alone supply the articles of exchange for this commerce, even to the French merchants of Upper Louisiana who carry on this traffic. Hence it naturally follows, that the furs from the Spanish territory, and belonging to Spanish subjects, are trans-

ported to Canada, where they increase the commercial wealth of the English nation, and swell the amount of its fiscal revenues.

Trade no doubt belongs of right to those nations who are sovereigns of the country in which are found such commodities as form the object of its commerce; but it belongs, in fact, to that nation which can best extract such productions, and export them with the greatest advantage for the trader and the consumer. This order of things, so beneficial to the great mass of society, cannot for a long time be restricted by any prohibitory law. The mines even of Mexico and Peru, in spite of the numerous soldiery which guard them, would be ransacked by foreign nations, did not the Spanish government monopolize the working.

When at the peace which followed the war of 1757, so disastrous for France, the cabinet of Versailles thought, or affected to think, that in yielding Canada to England it gave up nothing but a territory of no real advantage, a domain without revenues, a continual drawback without any returns, a constant object of ruinous and foreign war. England beheld in this cession, a new source of supplying the manufactories of the mother country by articles imported from its own colonies, of giving a fresh spur to its commerce, and increasing the resources of its marine.

When we consider that during forty years Canada has been English territory, and that this power has not once imposed the slightest direct revenue ; that no tax has been levied to defray the expenses of its government, but that all has been disbursed from the Exchequer ; and that those expenses, including the sums paid the Indians, amount annually to three hundred thousand pounds sterling ; it may well be imagined that England deems the possession of this colony of sufficient importance to its interests. Having no pretensions, at the peace of 1763, to the cession of Louisiana, England beheld with satisfaction the transfer of this colony to Spain, from a conviction that the Spanish government was less able than the French to direct the resources of this important colony to advantage, or throw obstacles in the way of the projects which the English cabinet had formed of applying these resources to its own profit, and becoming at some future period the proprietor of the soil. This intention was clearly manifested in 1780, when the garrisons of Florida marched against New Orleans, whilst a body of English and Indians invaded the Spanish settlements in the Illinois.

England, having at this epocha lost all hope of recovering by main force her American colonies, formed the project of surrounding them by her new possessions ; of checking and harassing them on each side by land, whilst

her marine annihilated their trade on the shores of the Atlantic; thus keeping them in a state of perpetual blockade. The possession of Louisiana would have completed the list of resources which were drawn from Canada, and which it was hoped might be increased. This station also furnished the means of menacing the Antilles, and of attacking them under any favorable circumstances: besides, it had the advantage of being not far distant from New Mexico; since, in twenty-five days march across a chain of vast meadows, thinly wooded, well watered, and intercepted neither by mountains nor large rivers, an army might be transported from St. Lewis to Santa-Fé. The other governments of Europe ought to have this circumstance continually in view, and be convinced of the importance of opposing by the most powerful obstacles the execution of a project, which Great Britain might not hastily be disposed to relinquish.

Though England failed in her attempt, in 1780, to wrest Louisiana from Spain, she did not give up the means of enriching herself by its territory; and the genius of that country, directed with so much earnestness and constancy towards the increase of its commerce, with no other rival than the apathy of the Spaniards, found little difficulty in the execution of its designs. What is here stated respecting the policy of England, is equally appli-

cable to the principles which govern the United States of America.

It is not easy to make a pecuniary estimation of the amount of the furs which England receives from America: the companies of Canada preserve the same silence on this subject as all other merchants with respect to their trade, and the political interests of England favor the mystery. We know, however, that in 1795 the duties paid on furs at the custom-house of London amounted to nineteen thousand pounds sterling; that the duties on furs, except on bear skins, are very low; and that the companies in Canada are very speedily and abundantly enriched by this commerce, as are their correspondents in England, who spread these furs throughout Europe, and even as far as China. The most wealthy of these companies trade to the north and west of the lakes, because in these regions the furs are finer and found in greater abundance than elsewhere: but the merchants who trade below the lakes in the Spanish provinces speedily enrich themselves, and it is of these only that we are now treating. Persons who appeared to be well informed on this subject, assured me that the north-west company draw goods annually from Great Britain to the amount of sixteen hundred and fifty-six thousand livres tournois, and that the furs which they exported sold for

three millions five hundred thousand livres; upon which, after deducting the freight, assurance, commission, and other charges, there remained every year on an average a profit of fifteen hundred and forty-four thousand livres.

The profits of the merchants under the Spanish Government settled at St. Lewis, and who deal in furs, are nothing in comparison with those of the English merchants; these trade on considerable capitals, and import from England the various European goods of which they stand in need, by means of an agent who is satisfied with his commission; or when pressed, obtain them from Montreal, at an advance of thirty or forty per cent. on the English prices. If their operations oblige them to delay their payments, they pay interest for the money at five per cent in England or America. The Spanish merchants, on the contrary, trading on small capitals, never find, and especially at New Orleans, such goods as they want, but are obliged to send for them to Montreal, where they are supplied by the English merchants; with whom having slender credit, they are always constrained to sell to those English companies the furs which they have collected. It is by means such as these that the profits of those companies accumulate, and thereby swell the mass of the riches of Great Britain: and the immense advantages thus accruing

to the English companies furnish them with the means of pushing their trade to the greatest extent possible.

The nation of the Sioux, broken into a considerable number of tribes along the river Saint Lewis, which empties itself into Lake Superior, furnishes the English traders with three hundred packets of roebuck skins, each worth one hundred livres. These packets are the specie, or course of exchange, by which other furs are estimated. The nation of the Sauteux, part of which lies between the fiftieth and fifty-second degrees of latitude, and ninety to ninety-five west longitude from the meridian of London, and who dwell chiefly on the banks of the Red River, supplies the English company with about an hundred packets of fine furs. The same company draws about seventeen hundred more from the remainder of the country, situated to the south of Lake La Pluie, the lake of the Woods, Lake Winnipic, and to the north of the sources of the Mississippi.

The English Companies push their trade, also, much farther to the south west of the countries which I have mentioned: one of those companies\* obtained from the government of Louisiana, some years since, the privilege of trading along the Missouri and to the west of the

\* Messrs. TODD and Co.

Mississippi, where they formed several establishments, and from which branched off a number of small forts at certain distances from each other, making progress in proportion as they discovered the means of trading with any new nations. The English merchants have spared neither labor nor expense for the purpose of extending their commerce as far as possible ; sending persons out on discovery, providing them with every thing necessary for an expedition of two or three years, and furnishing them with goods both for trading and making presents. Were the whole of these goods expended in the journey without any return of furs, the expedition is always accounted profitable, if those who undertake it pierce through new tracts, discover new rivers, and especially new nations: a second expedition, on such occasions, is then sent out, more numerous and more abundantly stored, which returns laden with articles that indemnify, by their immense profits, all the expense which had previously been incurred. It is confidently asserted, that the English have penetrated as far as that great chain of mountains which runs parallel with the Pacific Ocean, and which seems to separate the countries situated on the eastern side, as these are divided from the Atlantic by the Alleghany mountains. Several Indian nations, attached to the English merchants from the intercourse of trade, aid

them in their commerce by trafficking themselves with nations more remote; to whom they carry European goods, and bring back to those merchants the produce of their expeditions. f

The great store of goods for exchange belonging to the English companies is at Michilimackinack.\* This is the point of departure for the traders who go in search of furs, and of those also who convey these furs to Canada.

The communication of the English companies from Michilimackinack to Montreal is not by the navigation of lakes Ontario, Erie, etc. where there are few carrying places; they go up the river Otawas, join lake Nipissing and lake Huron by French River, and thus reach lake Michigan, at the entrance of which is Fort Michilimackinack. This route is intersected by six carrying places: the canoes are of bark, carrying only from three to four tons and nine men. This mode of conveyance is much more expensive and sometimes less expeditious than the navigation of the lakes, employing six weeks; but it is

\* Michilimackinack, in the Indian language, signifies a tortoise. It is a post established on a peninsula, and which defends the entrance of the lake Michigan. But the English, compelled to evacuate and give up this station to the United States, have established another on the island St. Joseph, which defends and commands the whole of the entrance of lake Superior. This, in every point of view, is a very preferable position.

preferred by the companies, because, however difficult the route, they know precisely the number of days which it requires for the journey, and which they cannot ascertain on the lakes from the great variation of the winds. This is an essential condition with the merchants of Canada, since the river St. Lawrence, being navigable only during a short and determined time, admits of no delay for the stated periods of receiving furs and sending them to Europe.

By combinations thus well calculated, by labor so judiciously directed, by expenses so wisely hazarded and so liberally supplied; in short, by unremitting ardor in discovering the fittest means of extending their trade, the English have at present gained possession of every branch of commerce in the Spanish territory. Every point in that region, as far as Western Florida, is supplied from London by means of two English companies that are settled at the Bahama islands, and who, having obtained from Spain the exclusive privilege of sending goods to Louisiana, import in exchange the small number of skins which they take from the Indian nations inhabiting Florida and Georgia.

To complete this faithful contrast between the useful and laudable activity of the English and the ruinous apathy of the Spaniards, we should add that the establish-

ments which the English companies have formed in Louisiana are always guarded by armed men in their pay. These establishments, which serve as temporary stores for goods and as forts for the protection of caravans, are situated on the rivers Owpas, Catopy, the Red River, St. Peter and Moins\* River, and are protected by small works constructed with earth, and by block houses, against any attacks from the Indians : thus England actually has soldiers and forts on the territory of the King of Spain, and in greater number than those of His Catholic Majesty.† It may readily be conceived, that in proportion as the English trade extends itself (as it has already done) to the more rich and populous parts of Upper Louisiana, this military force will increase ; and that on some future occasion it may be applied with success to other views far more dangerous than those of the fur trade.

This state of affairs excites regret and indignation, when we reflect how contrary it is to the nature of things ; and that, from the number of rivers which water Louisiana, from their direction and facility of navigation, the route of New Orleans seems to have been evidently marked out for the whole of this kind of produce.

\* See the map of Upper Louisiana.

† There are seventeen men at St. Lewis, and two at St. Geneviève.

Lake Winnipic is separated from fort Michilimackinack by seventy-two carrying-places; and from this place of general stores to Montreal, there are (as I have already said) thirty-six others. The seven months, during which the river St. Lawrence is closed, require such extreme exactness with respect to the conveyances, that fifteen days of delay only would occasion the failure of the trade for the whole year. The subjects of the King of Spain, on the contrary, would have only to traverse a carrying-place of twelve miles from this same lake Winnipic, and from the river Asseneboine to the Missouri. The productions of the countries bordering on these lakes might be conveyed to New Orleans by the rivers which fall into the Mississippi, the Missouri, and the other great rivers adjoining, and which are navigable from an hundred to eight hundred leagues, without rocks, falls, or rapids; these rivers seem to have been formed only to convey to the gulf of Mexico the various riches of the countries which they water, and to carry back in exchange the commodities of which they stand in need.

The perusal of the chapter on the Missouri, and the inspection of the map of Upper Louisiana, will fully justify my observations on this subject: but as I have not entered into details on navigation in this chapter, it is sufficient to state that the Mississippi, the Missouri, and the

various rivers which are tributary to them, are within the reach of such Indian tribes as are already known, nations of warriors, or hunters, settled in these countries hitherto so little frequented, and rich in animals of every kind; that these nations are mild, friendly, and hospitable, some of whom mingle the labors of agriculture with those of hunting; that a great number have as yet no concern in the fur trade; that amidst those countries already discovered, and beyond their limits, many tribes yet unknown no doubt exist; that, independently of the Mississippi and the Missouri, a considerable number of other rivers from St. Lewis to New Orleans empty themselves into the Mississippi after a course of greater or less extent, and on the banks of which dwell various other nations: from whence I conclude, that whatever be the injuries done to the interests of Spain by the introduction of the English companies into the territory of His Catholic Majesty, the evil is not yet so extensive or so inveterate as to be without remedy. But it is now time to think of those dangers, and of the means of removing them; since a few more years of apathy would render ineffectual these means which are now so simple and easy, as may be demonstrated by the geographical and topographical position of Upper and Lower Louisiana.

The principal measure to be adopted, and which will render every successive effort easy, is, that a constant and direct commerce be maintained between Europe and New Orleans; that this place be continually furnished with every kind of merchandise for the exchange necessary for the trade, and such as should be suited to the wants of the colony and the neighbouring states situated on the rivers, the waters of which flow into the Mississippi or into the gulf of Mexico. I have already mentioned that the subjects of the King of Spain inhabiting Louisiana, not finding at New Orleans the articles necessary for trade or their own consumption, procure them at fort Michilimackinack. These goods, purchased at Montreal at thirty per cent. above the London prices, cost at Michilimackinack twenty per cent. more for commission, and a further sum of twelve to fifteen per cent. for their conveyance to St. Lewis: the goods, therefore, brought to St. Lewis by the way of Canada, amount to seventy-five per cent. above the London market.

The carriage from New Orleans costs only five piastres the hundred weight; and we may suppose that there are few bales or chests of goods of that weight coming from Europe which are not worth much more than an hundred piastres: but in estimating them only at this rate, which is far below their real value, they would not

cost more than thirty-five or thirty-six per cent. above the European prices ; supposing also that the freights from the ports of France or Spain to New Orleans are not less than those from London to Montreal.

The establishment at New Orleans of houses of commerce, which in receiving goods from Europe must necessarily be under the direction of rich capitalists, would allow the traders of Louisiana the same advantages and the same credit as the English companies receive from the merchants of Montreal or London. This establishment would secure the carriage of the whole fur trade from Louisiana to New Orleans by the Mississippi.\* England has a positive advantage over all the other nations of Europe, which it is easy to take out of its hands by imitating its policy : this advantage arises from the well combined measures taken for the conveyance of its goods, from the system of navigation which it has established, from the low price of its insurances, and the quickness of its expeditions : but this advantage cannot over-balance the means of conveying, without any concurrence, by a navi-

\* Nothing can more effectually remedy a part of those inconveniencies than the industry of the American merchants ; but unfortunately they are obliged to draw the articles of exchange from the English manufactories, our own being totally unprovided.

gation free from obstacles, every kind of merchandise to the most distant nations, and of receiving, by the same route and with still greater facility, every sort of produce in exchange. England imports almost all its raw materials; the price of workmanship would enhance the value of its manufactures, did not the great use of machines make up for the loss which would arise from manual labor. The rest of the governments of Europe, with little attention, might provide themselves with the same resources; and the difference of the value of labor regulating that of the price of goods in the market, the advantage in our favor would be immense.

If the government of the United States fix its boundary line as was laid down by the treaty of 1783, this line, touching the most north-westerly point of the lake of the Woods, would cut off the English from all connexion with lake Winnipic, unless they make a round by Hudson's Bay and go up York river, with which it communicates, and that route would considerably increase the difficulty and expense. But even should the Americans not fix their boundary in this manner, or should the communication between the lake Winnipic and lake Superior not be taken away from the English, the advantages of commerce would be no less in favor of New Orleans, by the establishment of large warehouses and a

general magazine at St. Lewis. The enormous difference in the price of goods going up the Mississippi, and the great facility which this river gives for a speedy market for furs, would shut up all communications between the companies trading to the east of its course and Montreal with much more certainty than any prohibition or treaty.

The privileges of the English companies to trade on the territory of His Catholic Majesty are but temporary; these privileges expire at the end of three years; and as they are not yet very numerous, they may either not be increased or be entirely annulled. The merchant, as is well known, views his country in his interest; he becomes attached to the power which provides him the largest and speediest gains. The English companies employ Englishmen neither as agents, traders, nor soldiers; but Canadians only, whose decided attachment for their nation is so well known, that it is become proverbial to say, that, under the government and rule of the English, they never cease to call themselves Frenchmen. They never see a Frenchman without emotion: and if the French or merchants of Louisiana engaged in the fur trade, they would easily draw off the Canadians from the English companies.\*

\* Although the English merchants are now in possession of Louisiana, the French merchants may still reap considerable advantages from this honorable attachment of the Canadians.

The inhabitants of Louisiana had obtained from the Court of Madrid, after the peace of 1783, permission to purchase in the different ports of France such goods as they wanted, by paying a duty of six per cent on the importation, and as much for the exports: this permission was continued to the period of the French Revolution. The vessels which came from Bourdeaux were freighted with every article wanted in the colony; those which sailed from Havre de Grace imported from London, as articles of traffic with the Indians, clothes and blankets, which since the cession of Canada\* are not to be found in France. This facility gave still a little animation to the commerce of Louisiana, and rendered it less disadvantageous to the inhabitants, but the merchants of New Orleans wanted capital; † trade was deprived of that protection, encouragement, and liberty, which are always essentially necessary in growing establishments so far distant and so little known; — protection and liberty which it was not possible to hope for from Spain, because it demands an enlightened and unremitting attention,

\* I have collected the dimensions, kind, and quality of the different goods which are preferred by the Indian nations.

† This is no longer the case; since New Orleans is now filled with rich merchants.

which can never be expected from the Spanish character, nor from the principles of that government, till it has shaken off the lethargy which benumbs all its faculties.

The fur trade is not the only advantage which Louisiana offers for commerce. The preceding articles of this work show what vast resources might be found in the vast quantities of fine timber which grow on this colony, and in the productions of agriculture of every kind in the various latitudes of these countries. The gratuitous cession of lands with good titles (a condition mentioned here from the general defect on this point in the United States) would draw a great number of emigrants from Europe, Louisiana would soon become peopled, the banks of the Mississippi would be inhabited in their whole extent, and in a short space of time the resources of the country would be successively brought into action : independently of the commodities which would then be furnished for exportation by a more extensive and better cultivation, the mines, quarries, and salt-pits, which are very abundant in this country, would be explored ; and a rich provision of commerce would be found in its hemp, flax, tar, and oils. Louisiana would supply the wants of the colonies even better than the other States of America.

The whole of the productions, in short, of the rivers Ouicousin, the Illinois, the Ohio, and the Yahoo, having no other outlet than the Mississipi, must pass by New Orleans and necessarily increase its commerce.

The Illinois of the United States receive at present their goods from Michilimackinack ; Kentucky, Tenesse, and the north - west territory, from Philadelphia or Baltimore : on account of the want of storehouses well and regularly furnished at New Orleans.

The merchants of the ports in the Atlantic States and those of Montreal, finding their own interest in this mode of supply, pretend that it is not only the surest but the most economical for those countries. No one in the United States was interested in contradicting this assertion, or in examining how far it was founded ; since, were the truth once cleared up, a part of the Philadelphia and Baltimore trade would be ruined.— This assertion, however, cannot bear the slightest examination, as we have already shown in the chapter on Kentucky.

No danger can be incurred in descending the river, provided the pilots be attentive to avoid the trees and other impediments which are always to be found in rivers running through uninhabited countries ; and in ascending the river, no other inconvenience exists than the length of

the navigation.\* With respect to the expense of conveyance, the carriage from Philadelphia to the Illinois is twelve piastres the hundred weight; six for the three hundred and eighteen miles by land from Philadelphia to Pittsburgh, where the navigation of the Ohio begins, and six for transport on this river and that part of the Mississippi which boats are obliged to ascend.† The expenses from Baltimore are the same; the difference of the distance of forty miles to Pittsburgh is compensated by the bad state of the roads, and the crossing of the mountains. The expense from New Orleans to the Illinois is, as I have already said, five piastres the French hundred weight, which is seven piastres difference in favor of New Orleans, without reckoning the difference in the weight: goods, in short, are conveyed from Philadelphia or Baltimore to Franckfort in Kentucky, at thirty-three per cent above the price at these two markets; while the conveyance to the Illinois by New Orleans is not more than four or four and an half.

It is true that the conveyance from Philadelphia to the Illinois may be made in fifty-five or sixty days, whilst

\* See the chapter on the navigation of the Mississippi.

† The current of this river is the most rapid from the Ohio to the Missouri; the cause of which I have explained in the chapter which treats of this navigation.

that from New Orleans requires from seventy to seventy-five ; but this small difference in favor of the carriage from Philadelphia is more than balanced by the badness of the roads, in which a waggon with four or five horses can carry only twenty-five hundred weight ; by the loading and unloading, as well as the warehousing, which takes place at Pittsburgh ; and by accidents on the journey, which always diminish in a greater or less degree the value of the goods. Such are the inconveniencies of this mode of conveyance, whilst the Mississippi may be navigated as well as the Illinois in all seasons without a single portage, by boats, carrying from an hundred to an hundred and twenty thousand weight, and even by vessels of a still greater burthen.\*

The merchants of New York believe, that when the different canals opened by the State shall be finished, the goods by the North River, the Mohawk, Lake Oneida, and all the great lakes, will be conveyed for five piastres the hundred weight to Michilimackinack ; but the trouble of carrying-places, of loading and unloading on the road, will still be more sensibly felt, as well as the uncertainty of the navigation of the lakes. Admitting even that this expectation of the merchants of New York should be

\* Galleys carrying twelve guns may easily go up the Missouri.

realised, the goods which they might send would come to the same price at Michilimackinack as those from New Orleans would be worth at the Illinois. I have already stated that the expenses from Michilimackinack to the Illinois were from twelve to fifteen per cent: in addition to which, the conveyance would take a longer time, and be less secure than that of New Orleans. These facts are so precise and certain, that the English company which had obtained a privilege on the Mississippi was about to establish a house of commerce at New Orleans, to receive from London whatever articles might be wanted for trading with the Indians, and had also established a depôt at St. Lewis, when the declaration of war between England and the Court of Spain put a stop to this project. For these truths we may refer to the interest of the merchant and the consumer.

# LIST

OF

## *ARTICLES OF EXCHANGE,*

FITTED FOR THE COMMERCE OF THE WESTERN STATES, OF  
UPPER AND LOWER LOUISIANA, AND THE FUR TRADE  
WITH THE INDIANS.



## WESTERN STATES.

WESTERN STATES.	OBSERVATIONS.
WINES.	
Teneriffe and Fayal.	No French wines, unless sent as a sample.
Lisbon, in quarts.	
Spanish, ditto.	
Malaga, of an inferior quality, ditto	Small parcels of Madeira.
French and Spanish brandies.	
Holland gin, in casks, long bottles, and chests.	

WESTERN STATES.	OBSERVATIONS.
<p style="text-align: center;">ARMS.</p> <p>Cheap cutlasses.</p> <p>Long-barrelled guns for hunting and military uses.</p> <p>A few carabines.</p> <p>Large pistols.</p> <p>Brass two and three-pounders</p>	<p>Called <i>briquets</i>.</p> <p>Known by the name of Tull's fusils of Bourdeaux.</p>
<p style="text-align: center;">DRY GOODS.</p> <p>Coarse blankets.</p> <p>A few fine.</p> <p>Woollen goods for clothing.</p> <p>Ginghams.</p> <p>Cloths from fifty sous to nine livres the ell; a few from fourteen to forty-two livres.</p> <p>Printed cotton goods, from thirty sous to three livres the ell.</p>	<p>Chiefly blue, grey, and quaker colors.</p> <p>Some pieces of the first quality might be added by way of specimen.</p>

WESTERN STATES.	OBSERVATIONS.
Common woollen carpets.	For curtains and pillows.
Thread and worsted stockings, from twenty sous to four livres the pair.	
Very coarse muslins.	
A few black, white, blue and quaker colored taffetas.	
Black and colored silk handkerchiefs for cravats.	
Ditto, for shawls.	Figured borders ; a few fashionable for samples.
Cotton shawls.	
Assortment of common ribband.	
Assortment of tape.	
Assortment of black velvet ribband.	
Assortment of silk and cotton thread.	Common, for breeches and women's gowns.
Cloth lining	
A few pieces of black satin.	

WESTERN STATES.	OBSERVATIONS.
Cloth for shirts.	It is doubtful whether we can furnish as cheap as Ireland; Irish shirts may be had at three livres.
Cloth of Bretagne.	
Black, violet and olive colored velveret.	
Velvets for collars or breeches.	
Black, grey, and a few white silk stockings.	
Cambrics, from four to twelve livres the ell.	
Lawns, from four to twelve livres the ell.	
Men's and women's gloves.	
Black lace, from seven sols to four livres.	
Oiled cloths of different colors.	
Straw hats.	Colored, but large; a few white.
Cutlery of every sort.	Of different patterns, to cover tables; it is doubtful if we can furnish as cheap as Germany.
	Taking care to export only such as are equal to the English; unfortunately we have few, especially at low prices.

WESTERN STATES.	OBSERVATIONS.
<p>A few fashionable dresses.</p> <p>Women's shoes.</p> <p>Cheap clocks.</p> <p>Silver watches, from thirty to forty-eight livres.</p> <p>A few gold watches, from five to six louis.</p> <p>Silver tea-spoons.</p> <p>Shoe-buckles.</p> <p>Tea equipage.</p> <p>Common china, English form.</p> <p>Looking-glasses, from eight inches to twenty-two.</p> <p>Window glass.</p> <p>A few common ditto</p> <p>Damask table cloth.</p> <p>White paper.</p> <p>A few cheap prints.</p> <p>Mercery of every kind.</p> <p>Jewellery, rings, and ear-rings.</p> <p>Shirt pins, wrist buttons, at the lowest prices.</p>	<p>Very light, English fashion.</p> <p>Thin patterns and cheap.</p> <p>Common; I fear we cannot furnish them so cheap as England.</p> <p>Same price as England.</p> <p>Mahogany frames, slightly gilt.</p> <p>In great quantity, six inches by eight, or eight by ten.</p> <p>Nine by seven, English measure.</p> <p>Low rate, and large patterns.</p> <p>And every article for computing houses.</p>

## UPPER AND LOWER LOUISIANA.

UPPER AND LOWER LOUISIANA.	OBSERVATIONS.
<p>In general the same articles as for the Western States, to which may be added a few articles of luxury, such as fashionable dresses, household furniture, etc. but at low prices.</p> <p>Ladies' fashionable shoes.</p> <p>Ladies' colored silk and cotton stockings, with embroidered clocks.</p> <p>Elegant silk and cotton shawls.</p> <p>Fine paper for rooms.</p> <p>Ladies parasols.</p> <p>Fine shirtings and sheetings.</p> <p>Good cambricks and lawns.</p> <p>A few light coaches and carriolets.</p> <p>Great coats of linen and oiled taffety.</p> <p>French wines of every price and quality, both in casks and bottles.</p>	<p>For Lower Louisiana only.</p> <p>These carriages ought to be constructed for hot climates ; that is, with open tops, etc.</p>
<p><i>N. B.</i> As the Americans have a direct commerce with India, they can furnish all the produce of the Indian manufactures 25 per cent. cheaper than the Europeans.</p>	<p><i>Note.</i> With respect to Upper Louisiana, nothing costly ; nearly the same articles as for the Western States.</p>

## FOR THE FUR TRADE.

FOR THE FUR TRADE.	OBSERVATIONS.
<p>Red and blue woollen cloths.</p> <p>Large red coats, worsted lace.</p> <p>Coarse hats, bound with worsted lace, and covered with showy feathers.</p> <p>London muskets.</p> <p>Carabines, of the form we have specified.</p> <p>White powder-horns.</p> <p>Powder and balls.</p> <p>Shells.</p> <p>Drinking cups of china or bone.</p> <p>Blue goblets.</p> <p>Small drinking cups, colored blue, black, and white.</p> <p>Assortments of brass wires.</p> <p>Framed looking glasses.</p> <p>Horse-bells of various sizes.</p> <p>Copper rings and ear-rings.</p> <p>Box combs.</p> <p>Awls and steels.</p> <p>Gun-drawers.</p> <p>Gun flints.</p>	<p>But small quantities of the blue.</p> <p>Those of Tull, made at Bordeaux, might be substituted ; these are preferable, but not much in use.</p>

FOR THE FUR TRADE.	OBSERVATIONS.
<p>Black silk handkerchiefs.  Square blue cotton handkerchiefs.  Large Indian three-cornered coverlids.    Ready made shirts,</p>	<p>This kind of coverlid is lost in our manufactories.  Few white, but plenty colored; the more chequered and variegated, the better.</p>
<p>Copper saucepans of all sizes.  Pick-axes, hatchets, and large nails.  Tomahawks.  Spears in form of a half pike.  Short sabres.  Large and small scalping knives with sheaths.  Vermillion.  Silver and metal Medals.</p>	<p>These medals serve as presents for the chiefs. It ought to be observed, that they should have only one figure upon them; for when an Indian sees more, he will not accept the medal: <i>I have but one heart</i>, he tells you, <i>I cannot love more than one person!</i></p>

## CHAPTER XXIX.

*Observations on the history of the United States—Origin of their independence—Different parties since the Revolution—Influence of the English party on General Washington—Treaty of 1795—Defects of that treaty—Persecutions under the government of President Adams—Constitution shaken—Hostilities against France—The Federalists unmasked—Separation proposed—Project of the English against Louisiana.*

WHEN I visited Louisiana, of which France had been an early but unprofitable owner, and which has since been a burdensome possession to Spain, the opinion had long prevailed that this province would again change its master, and that (according to the circumstances of the first crisis which should take place in North America) it would be France or England who would become the proprietors, before the United States were sufficiently powerful to risk placing themselves in

competition. It was, therefore, interesting to acquire a knowledge of the rights, the hopes, and the resources of each of those governments: nor should it, perhaps, be deemed superfluous to present, in a political description of this country, a sketch of the circumstances under which the question relative to its possession ought to be decided; for it is natural to ask, why the United States, judged at first to be the power which would favor the views of one of the other two candidates for possession, should be the power to whose lot it should definitively fall. This government becomes, therefore, an object on which the historian or observer is necessarily led to fix his attention.

Although the English colonies in North America appeared to be established on principles altogether different, some under governments depending on the Crown, others by charters and privileges granted to companies, and finally by absolute infeudations (such as Pennsylvania, which was given to William Penn, with the reserve of the sovereignty to the Crown) the basis of those governments was still the same as that of the English constitution, which is thought to be representative but which is not so in reality.

If the claim of voting taxes for the service of the mother country was not founded, they had the right of

levying taxes on themselves for the expenses of their home administration. At a distance from the seductions of courts and from too direct an influence of the Crown, they contrived to modify the administration of the colonies so well, by those forms which are called republican because they are just, that the spirit of the nation proceeded rapidly towards independence and liberty. Popular resistance to the government frequently occurred, whenever it was believed, with or without reason, that there was cause of complaint. After the fall of that despotic government, improperly called an English republic, the independence of the sectaries of Cromwell, colonised in Virginia, discovered itself in every crisis of danger from the reign of Charles II. It soon became more difficult to foresee how such explosions might be prevented, than to forebode their progress; especially when they found fresh food and incitements in a growing population. From the beginning of the seventeenth century, therefore, the future division of the colonies and the mother country was openly announced, and the predictions on this point were so precise, that modern prophets have had no other merit than to renew and bring them into action. But the small intercourse of the colonies with each other rendered a general and complete revolt for a long time dangerous, and, in the first period of the

accession of the House of Hanover, which held the reins with a vigorous hand, the success would have been very precarious. It was of late only that the Duke of Choiseul undertook, examined, and determined, with persons whose names remain unknown to us, the plan of the separation, which was to be realised at the first favorable moment. It fell to the lot of the unfortunate Lewis XVI. to execute this design of the French cabinet, which had been too long decided on as advantageous to the State to permit him to place, in opposition to its execution, either his own political sentiments or his personal repugnance. It is asserted by the Americans, that it was General Lee who first proposed absolute independence and a republic: this General, so singularly modest, was less celebrated during his life than after his death, on account of the discovery that has been made of his being the author of the celebrated "*Letters of JUNIUS.*"

But political disputes, like religious controversy, silence without convincing. A great party of royalists remained yet to be converted. Constrained to wear a mask, and to adopt a catch-word, they styled themselves *Federalists* out of respect to the new Government, whilst their opponents sometimes assumed the name of *democrats*, and always of *republicans*; they were the *torics* and *whigs* of America: the first were artful and successful,

the latter confiding and consequently dupes. The federalists soon procured their own nomination to the chief places in the legislature, were raised to the most important employments in the administration, and honored even by Washington, then become the principal defender and chief of the new state. These two opinions soon divided the whole of the inhabitants of the United States into two classes nearly equal; and however incredible it may now appear, that so many men, who had scarcely terminated a war of liberty in the most elevated sense, should in so short a space of time have adopted sentiments so contrary; such was nevertheless the truth.

Popular opinion is at the mercy of every breeze, and what are termed *principles* are often only *passions*. The look of a hero, who is the object of public admiration, is sometimes sufficient to determine a people to adopt his affections or his dislikes. This was the case with the great Washington and the people of the United States: from a pusillanimous policy, erroneous but never accused of corruption, the chief of the new republic appeared insensible to the insults which England had begun to offer, and which were either concealed, tolerated, or excused. He not only suffered (and, when there is power of resistance, to *suffer* is to *will*,) individuals formerly known, some by their clamours, others by their open hostilities

against the republic, to obtain popular favor in elections, but gave himself up by degrees to the direction and influence of ministers, who were party men too violent to respect even the decencies which were required from their station. When the war in 1793 broke out between England and France, he did more: he quietly suffered the English to enjoy many peculiar privileges in the United States, in contempt of the neutrality which he ought to have observed. It may easily be imagined, that when the federalists perceived this disposition in their first magistrate, a man whose authority was indisputable, they did not fail to encourage such a propensity; and thus was that illustrious personage himself the first dupe of a faction, which, assuming the title of *federalist*, instituted itself to destroy the federation, and his name became a corrupted currency which perverted many well meaning but weak citizens.

From that period federalism became in some sort organised in society, and was openly professed, because the absolute freedom of the press, which treats with as little respect conventions made by the state with foreign powers as its own internal laws, permits individuals to write if they think proper in a contrary sense to that of their constitutional representatives.

England, whose capital and credit yield such powerful support to the commerce of the United States, ranged first under its banners the various classes of merchants, and especially the bankers. These establishments, which have such an enormous influence in every commercial country, were so many powers leagued with the federalists, attacking and annihilating the industry of their adversaries. The English government distributed throughout its fleets, and the banking houses of the three kingdoms, lists formed by the federalists; and thus the republican traders of the United States, by losing their vessels and their credit, were punished for the political opinions which they dared to profess, even under a government whose independence was acknowledged.

Who would imagine, that while the party in favor of England was so active, so violent, and so powerful, Washington would have taken upon himself the task of denying its influence before the French Government?—Mr. Monroe was charged with this singular commission; and immediately after, in the midst of the war, Washington pretended to establish, in the face of his contemporaries and posterity, this new maxim: that the treaty of commerce, the most advantageous to one of two belligerent powers, was no derogation in a neutral state to the sense of its engagements. But such a paradox attracted the attention

of enlightened men, the error was so completely demonstrated, that it soon became impossible to defend it on any principles of reason, and the only resource left was the assertion, that there was no other alternative than a treaty of commerce or a war with England. The mass of the people were not at first affrighted at this alternative, but measures were taken by degrees to decide them in favor of the treaty. From the humble itinerant preacher to the proud episcopalian, from the lowest usher in the meanest school to the most celebrated orator in the legislature, the journalists, pamphleteers, and spokesmen at clubs, all were active in detailing the miseries of war, and exciting, under the respectable names of religion and humanity, the feelings of weakness, avarice, and fear.

This last expression may appear singular when applied to a hero, and above all when we reflect how ill-founded were these apprehensions, since it would have cost England too high a price to have received a second lesson from America. Engaged in a ruinous war with France, it would have been necessary for England, in declaring war with America, to have found a remedy for the despair of some hundred thousands of impoverished families, who live in England on the produce of manufactures imported into the United States, consisting of articles of every kind, from the dress and furniture of the inhabitants of towns

to the hatchet of the woodman and the ploughshare of the farmer. These articles are likewise exported from the United States to the Antilles, to all the European Colonies, and among the Indians. The whole of these demands would instantly have ceased, and would soon have been supplied by thousands of manufactories raised by degrees in the United States, or by importations from the other nations of Europe. The payment of thirty or forty thousand piastres, private debts due by American merchants, would have been suspended; more than two thousand American privateers would have swept the English commerce from the seas; Canada would immediately have been lost; the English colonies, which draw all their resources from the United States, would have become vast cemeteries; and above all, France, with whom England was at that moment deeply engaged in war, would have gained immensely by so formidable a junction, which the British Ministry could not have provoked without incurring the charge of treason. Various other considerations, which might be added, afford a striking example, that Cabinets the most renowned for their sagacity are not always exempt from error.

But after all, there must have been some foundation for these fears, and this the ministerial party were eager to explain. The devastation of part of the coast,

the bombardment of a few towns, and the pillage of a few Indian hordes: such were the miserable expedients, which, had they taken place, would have produced no other consequence than that of inspiring eternal hatred between the two countries; they would have stamped a mark of disgrace on the glory of a great nation; and the points they could have insured would have been too inconsiderable and insulated to have diminished the power or resources of the Americans. With respect to the Indians, their most formidable tribes were in the power of France, the rest were allies of the United States, and the enemies they had to reckon against them were small in number. Upon the whole, the situation of the two countries was evidently such, that England having very few resources and the United States many, the hypothesis of a declaration of war from England, that is, the attack of the weak on the strong, was an opinion altogether absurd.

But whether it were absurd or not, it became the prevailing opinion.—Absurdities and chimeras are the habitual dangers of popular governments! This strange assertion was believed, and a panic terror, that disgraceful malady which sometimes takes place among nations the most illustrious, and from which even the Romans were not exempt, so seized on the Americans,

that they became seditious from fear ; and a great number of tumultuous meetings took place, in which this pretended salvation treaty was loudly called for. The militia even petitioned ; and those of the most fanatical State in the Union (Connecticut) declared themselves ready to march, not against the enemy of the State, but against the Congress, to force its sanction. When at length the violence of their clamours had risen to such an height as to shelter the glory of Washington beneath the cloke of necessity, this great man took the pen and signed ; but it must be observed, that he sacrificed, on this occasion, his own opinion to that of the public.

According to the stipulations of this treaty, which were as insufficient as they were humbling for the nation, and in which the most sacred of rights, that of persons, was sacrificed to certain state maxims of unalienable allegiance, thousands of sailors, who had been pressed and torn with violence from their country, were constrained to remain in the service of the English marine. Scarcely was any stipulation made to prevent the execution of arbitrary sentences relative to vessels seized on the simple suspicion of being freighted with contraband merchandise. So little value was placed on the preservation

of the honor and respect due to the flag of a great, free, and independent nation, that the smallest English vessel of the royal marine had a right to visit, stop, and take possession of a whole fleet of merchantmen. One of the most important articles of exportation from the Southern States, cotton, was entirely forgotten; and the admission to the equal navigation of the Mississippi, which was not yet a territorial right of the United States, but only a privilege granted them by Spain, was given up to England without the participation of the Court of Madrid. By this arrangement, the federal government gave back the privilege which it had just obtained for itself, of navigating this river, to a nation which had not only renounced it by formal treaties, but which preserved neither port nor a single acre of land.

This treaty blasted a leaf of the laurels gained by Washington, and which had been the recompense of so much wisdom, prudence, and civic virtue. If the persons who thus perfidiously influenced him, at a period so delicate and difficult of his political life, had on the contrary advised him to observe a firm and just neutrality towards England, and a friendly conduct towards France, we are led to think that he would have sullied neither his own glory nor that of his country.

Under the successor of General Washington, Mr. Adams, the history of federalism presents little else than a tissue of intrigues for the introduction of despotism. The time in which it was possible to suppose that any great errors could be committed by a republican government was past; Mr. Adams, nevertheless, accepted the sacrifice of a law of his country as the first incense of adulation. The state was delivered up to him, bound as it were hand and foot, on condition that he would satisfy first his own hatred, and then avenge that of the federalists against the republicans, leaving to farther examination what should be done with the republic.

But as no formal accusation could be brought against the republican party, this vengeance of the federalists was directed against the cause which they supported: liberty was attacked in its very entrenchments. The journalists were excluded from the galleries of the Congress by a simple order of police; and by this interdiction of the newspapers, which in the United States fill the office of a public magistracy, the guardian of the rights of the people, the first blow was struck at the vitals of the constitution. The second was a direct law against the liberty of the press, a right established on the altar of this same constitution, and considered by the citizens of every rank as the palladium of their liberty. If, indeed,

the unlimited liberty of the press can exist any where without danger, it is certainly in a nation among whom we find neither those classes who for want of other employment are active in spreading sedition, nor those political fanatics who by their extravagant notions attack the fundamental principles of civilisation.

The people of the United States can be compared with no other: composed for the most part of proprietors, deeply imbued with principles of morality, enlightened with respect to the interests of their country, reflecting and deliberating always before they act, were the government to relax, they would accelerate its progress with wisdom and prudence. Unlike our populace in this point, who are for the most part ignorant and corrupted, acquainted with no basis or principle of true liberty, full of impetuosity, acting first and then deliberating on what ought to have been done.

This suspension of the constitution can be justified only when it becomes a measure of public safety. In this instance, on the contrary, it appeared to have been made entirely an instrument of party; for the judiciary body, devoted to the federal interest, employed all its influence to gratify the revenge of this faction. The republicans unanimously disdained to involve the tribunals in their own behalf, and chose rather, whenever they

were calumniated, to appeal to the public, than have to reproach themselves with the sentence of a corrupted judge.

Mr. Adams took advantage of this measure to wreak his vengeance for his insulted dignity on some idle scribbler, who had been guilty of writing a few libellous invectives against him ; but he permitted, with great equanimity, the circulation of every kind of calumny and abuse against Mr. Jefferson, the Vice-President, who was treated by the federalist writers as the vilest of men, though there are few who have equalled him either in wisdom or virtue.

A member of Congress expiates with the ruin of his fortune and a severe imprisonment, a letter of censure on some measures of administration ; and a persecution was commenced against Mr. Cooper of Manchester, which would present, were it known, as barbarous a violation of all the forms of justice as that of the inquisitions of state and religion, which heretofore so much disgraced Europe.

But the impatience of the federalists, and above all the plans of Mr. Adams, required something more than secret oppression, by patient submission to which the citizens they hated were destined to perish, together with the republican constitution. To effect this, it was neces-

sary to arm, and France was held out as the pretence for that measure.

The piracies committed by the English, and tolerated by the United States, in virtue of their humble treaty of 1795, had obliged the French Government, especially in the colonies, to put themselves on the footing of equality, according to the rights of nations. Mr. Adams seized with eagerness an opportunity of avenging this concurrence; and in order to affect his purpose, he caused a decree to be passed in Congress to attack French ships; and to render the rupture irreconcilable, he formally broke the alliance of 1787, notwithstanding the advantageous articles which it contained for the United States. The most important article of this alliance, without doubt, was the renunciation of France to the re-acquisition of Louisiana and Canada. In this mode, the Anglo-federal faction destroyed with the torch of hatred the indirect title to one of the most valuable possessions of their country.

If the free option of peace or war had been proposed to the French Government, as is practised among civilised nations, the depredations in the Antilles, which afterwards took place, would have been stopped; nor would the French have suffered themselves to be so deceived by Mr. Adams's ambassadors, the courtesy of whose conduct

was only to mislead with more facility ; Mr. Adams could have found no pretence to arm by sea and land, nor would he have dared to alarm the people with the fear of an invasion by the French ; an invasion by a power at fifteen hundred leagues distance, at war with all Europe, and who were in the physical impossibility with a ruined navy of conquering a nation, which, as long as it remains united, must for ever be out of the reach of danger.

In the same manner as Washington had excited terror with respect to England, so Mr. Adams succeeded in raising the war-whoop against France ; and under pretence of this absurd invasion, the whole of the anglo-federal party took arms, and organised themselves into corps of volunteers. Money, places, and rewards to support this pretended war were blindly voted by Congress, yielding with implicit submission to the will of Mr. Adams.

While this militia waited for an opportunity of signalising their courage against the French, they made a display of their bravery by numberless acts of violation of the public peace. They were sure that no inquiries would be made into their conduct ; nor did the President complain of the dishonor done his party, or of the odium with which it covered him : on the contrary,

his expressive silence was a sort of encouragement to proceed.

But what in history will mark with eternal reprobation the character of Mr. Adams, is the following fact: the crew of a French frigate, \* without the slightest suspicion of the possibility of war with the United States, seeing a frigate with American colors bear down on them, ran in crowds on the deck to salute a vessel belonging to a friendly nation. A broadside from the American frigate covered the deck in a moment with dead and wounded ! This atrocious deed, new in the annals of war among civilised nations, was highly applauded by Mr. Adams, as a brave and heroic action. †

Such acts resolved at length the doubts and roused the energies of the republican party : military bodies and counter - associations were formed. Observers began to doubt, in their turn, whether the Anglo-federal legions, clerks, shopkeepers, and wholesale dealers, notaries, and lawyers, English agents and factors, would be capable of struggling with battalions composed of the vigorous woodmen and robust farmers of the Western States.

\* The Insurgent, bound from France for the West India Colonies.

† Mr. Adams's orders must have been very precise, since the commander of the American frigate had the character of a brave and loyal officer.

What will seem incredible is, that the federalist party, seeing this opposition, carried their extravagance so far as to propose a separation as the means of public safety. Rather separate than not rule was their watchword. The States in which the opinion respecting this separation was the most prevalent, were precisely those that would have suffered the most had it taken place: such are the States of New England, already very populous, and of which the lands are considerably increased in value. These States already contain inhabitants that are not proprietors, and even poor, from whom they are relieved by emigrations to the Western Provinces. Circumscribed after the separation within narrow limits, and taxed for the support of the monarchical government for which they are so anxious, what would have been their situation had such a measure been adopted? It was, however, only by way of menace, that they spoke to the republican States of this separation, and who, were it not for the attachment which every true American feels for the independence of his country, might have found powerful motives of consolation in such an event.



## CHAPTER XXX.

*Ancient projects of the European powers respecting Louisiana—  
Means taken by Spain for preserving it—Views of England  
upon Louisiana—Policy of France in ceding this colony—  
Justification of France against an old reproach of the  
Federalists.*

WHILE the question respecting the separation in the United States was in agitation, Spain, perceiving that the English had established ports and compters on the Oupas, the Catopi, the Red River, St. Peter's, and Moins River, and thereby monopolised the fur trade of the Sioux, Mandane, Ponca, Sauteux, and Panis nations, and were making preparations to penetrate into other parts of Louisiana, endeavoured by every means to take advantage of these divisions of the two parties, in order to keep the colony in its own possession. It was natural

for this power to look for support from the republican States of the north-west, alike hostile to the English and the Federalists, and the most flattering offers were held out to engage them to such separation. The sacrifice of money, which Spain was resolved to make, seemed to promise success; this was, however, rejected, as well as every kind of political connexion. The reasons which were alledged by the republicans for their conduct on this occasion were, that the people possessed such independence of spirit, that they scarcely thought themselves sufficiently free under their present constitution, and that they would despise the protection of a government, monarchical in the metropolis, despotic in the colony, and often tyrannical in its administration; while, in order for such a people as those of the North-western States to think themselves protected, it was necessary that the protecting power should present itself with very different resources, and far superior energy; that their industry would be bounded, since it could find no increase by their intercourse with Spain; and upon the whole, that the people had judgment enough to discern, that a power which can scarcely maintain its own possessions, would be unable to guard those of others. It was in consequence of this negotiation, that the court of Spain has for some time past opened all the avenues into Upper Louisiana to the Americans,

exciting them to emigration by offering them lands for nothing : but what appears inexplicable is, that this measure has not been extended to Lower Louisiana, where the passage of the river and all kind of settlement on the right side are absolutely forbidden.

Could Spain imagine that the Americans who might occupy Upper Louisiana would be more faithful and less dangerous than those who should dwell in the lower parts? or was this limit placed in order to keep them from the road which leads to New Mexico? On either of these suppositions, the conduct of Spain was erroneous; since a despotic government ought never to place its confidence in subjects influenced by the love of liberty; and because, on this hypothesis, it is much more dangerous to suffer them to occupy the heights than the plains.

England, after a war as useless as it was expensive, and still determined to reduce the United States to obedience, flattered herself that she should soon find the means by diplomatic agency to break down the walls which she had hitherto been unable to shake. An embassy was organised at the peace; but this embassy soon degraded its character, by the adoption of measures tending to the establishment of the project it had in view. As soon as it was perceived that swarms of this new republican people were thronging to inhabit the fertile country which

borders the Mississippi, it was conceived that these vast waters becoming as essential to the States forming in the west, as those of the Atlantic were to the other States, the power that was master of Louisiana might one day become master of these States also. History will disclose the intrigues which then took place. We have mentioned that only of which Blount was the contriver, and which Mr. Adams's friendship was anxious to conceal from his countrymen, to whom, nevertheless, it was highly important that it should be known, in order to discriminate between their friends and their enemies.

It was natural also for the English Government to covet so fine a possession on various accounts. The exhausted state of the soil of Jamaica would necessarily lead the English capitalists to wish for the acquisition of Lower Louisiana, the fertility of which might procure them the greatest advantage for the employment of their funds. Supplies of wood, corn, cattle, and provisions for the whole of the Antilles, might be furnished from Upper Louisiana. In the hands of English merchants, the fur trade and other commerce with the Indians would become a vast and lucrative monopoly. The Southern Sea being in some sort under their direction, favored their trade with Siam, Cochin China, Japan, and even Bengal: New Orleans, through which flow all the rivers

of the immense bason which forms the middle of North America, might have become one of the first commercial cities of the world, as the storehouse only of the exportations of the United States: a maritime arsenal, in short, supplied with the timber of Florida, would have formed a military post, commanding the colonies of the rest of the European powers, and seizing on such as might best suit its convenience. These projects have now vanished, and the idea of Louisiana becoming an English possession is like a vision which disappears at the dawn of day.

The conviction at present of the weakness of every ultramarine power to maintain itself in Louisiana against the will of the United States, has determined the French cabinet to cede to this power that colony, which it had received from Spain; and of which, if the possession could have been secured, France would have discovered the means sooner than England, since it could more easily have permitted a larger emigration; while the country itself was peopled with inhabitants who spoke the same language and felt the same affections, independently of a still greater number who would have come from Canada. The long and steady service of the troops would have supplied the means of speedily recruiting the number of its soldiers; France would have had the support of the

Spanish colonies, the old friendship of the Indian nations, many families of which were formerly united by ties of marriage with the French, and whom therefore they considered as brethren: but, above all, France had for its ally against the United States, this nation itself; that is to say, the party of the Tories or Federalists, who were desirous of a separation and anxious for an hereditary government, but who desired it only for their own exclusive and proper advantage, and without subjection. How easy would it have been for France to have gained over this faction, in case of need; and, if the internal interests of the colony had been ably directed, it would soon have acquired strength by its own means, and would have ensured its safety by its courage alone.

We must, however, admit that it would not have been easy to maintain such a system for a length of time. The defensive means of France might not have been of long duration, since they would have been weakened fatally by the slightest error which should have been committed: nor could the French reasonably hope to be enabled to make a long resistance to so vigorous a mass of people as that of the United States; the invasion of the colony would have taken place sooner or later, and its loss would have been as disastrous, after all the expense it would have cost, as a failure would have been disgraceful.

The cession, therefore, of Louisiana is the result of profound policy.

With respect to the glory of France, as she makes this sacrifice not under a government habituated to disgraceful treaties, but under that of heroism, posterity as well as contemporaries will see nothing in this act of cession but a rare example in history, of that of an homage which wisdom pays to destiny. Let us remark, also, in support of the cession, that the cabinets of Choiseul and Vergennes, which, in times when calumny was called history and persecution republicanism, were so often unjustly censured, gave up all pretensions to this colony, and that with so much facility that they were no doubt actuated by strong reasons of state. The former of these Ministers was perfectly persuaded that so many colonies of different nations, mingling along so enormous an extent of the same continent, could not live together in peace; and it appears also that Franklin had so clearly convinced the Ministers of Lewis XVI. of the great impolicy of endeavouring to regain Louisiana or Canada, that no trace is found of any opposition to the renunciation of these colonies, which he solicited and obtained. Affairs would have remained on this footing, if the Federalists in the blindness of their fury had not broken the alliance of 1785. It is to this faction, therefore, that the United States owe the sacrifices

they have been forced to make, in order to obtain from France the cession of Louisiana.

France, by the treaty of 1785, had certainly renounced all pretension to any acquisition in North America, and consequently to Louisiana; but this treaty lost all its force when it was first mutilated by the Congress. The French Republic, from the moment of its institution, offered to represent the King in its transactions with the United States; but the Congress appeared scrupulously uncertain whether it could acknowledge in another nation the sacred right of resuming the exercise of sovereignty, and held itself bound by a guarantee of an interest purely national, given to a preceding government.

It was from such fallacious reasonings, and a pretended conflict of duties, that Washington was authorised to take an advantage, and to take it somewhat usuriously. He did so, by purchasing from the French government, in favor of the payment of a debt not yet due, the annulling one of the principal articles of the treaty, the guarantee of the Antilles. In this manner he pleaded the necessity of circumstances, in order to exempt himself from a great by the performance of a trivial duty. It surely was not the small sum of two or three millions of piastres, which could indemnify France for the guarantee of its islands, on which the English then could have no

pretensions ; and its forced consent to so inadequate a compensation ought not to prevent us from censuring this infraction of an alliance purchased with so much expense of blood and treasure. This guarantee being in short the only essential advantage which France gained in return for those she granted, the United States ought to have considered the Republic, from the time of the refusal of the guarantee, as having entered, as far as respects themselves, into all its antecedent rights and claims on the colonies of North America, and have felt that the silence which was observed was only the effect of that reserve which circumstances rendered necessary.

The treaty of commerce with England in 1795 at length took place, which must be reprobated as a violation not only of the alliance with France, but also of that neutrality which the United States had purchased so cheaply, and which was so ill observed. The admission of the English into the Mississippi proved that the government of the United States was in the interests of the British cabinet ; and that the government of France ought no longer to be the dupe of its renunciation in the treaty of 1785 ; that it should begin to take measures of safety, and not refuse the preference for the possession of Louisiana, half of which was already occupied by the English posts, threatening a speedy invasion of the other.



## CHAPTER XXXI.

*New relations of the European nations with the United States after the cession of Louisiana—France—England—Navigation of the Mississippi—Emigration from Canada—Renewal of the treaty of 1795 with England—Observations on New Mexico—Straits of Panama—Advantages to Spain in adhering to the republican party—Natives.*

FROM the junction of Louisiana with the United States, the friends of peace may perceive, in the new relations of this power with France, the most happy consequences; and we are led at the same time to throw a glance on the situation of those powers with respect to Spain and England.

After having ceded Louisiana, it must be admitted that France can never wish to regain possession of

Canada ; a country more burdensome than profitable to an European power from its bad position, since the great inconvenience of this colony is the having but one outlet, the river St. Lawrence, which is also choked up seven months in the year by the ice. If England perseveres in keeping possession of this colony in defiance of the American colonies, France, better counselled, will henceforth maintain with the United States neither the relations of a frontier nor a rival power, but only such as may result from the peaceable intercourse of trade, the balance of which is and always will be in favor of the United States, and which they themselves will naturally be anxious to encourage. If, however, in the course of time, they should perceive that we are resolved to establish ourselves as the avengers of the injured rights of maritime nations, who could serve them better than ourselves in support of a cause which becomes principally their own, since they hold the highest rank among the nations who navigate under a neutral flag. Moreover, when the question of a separation in the United States shall again be brought forwards by the Federalists, under the pretence of new acquisitions which throw still farther back the frontiers of the state, or that of delays and irregularities in an internal administration so extensive, will it be France or England who shall be most anxious

to stifle that dangerous party and to insure the integrity of the Republick? And lastly is it to be supposed that England, who may have friends or emissaries in almost every family of the United States, will not employ all those means of influence to renew the trials which already have been made for the abolition of a part or of the whole Republick? It appears therefore impossible in our eyes, that the United States, under an enlightened administration, should, through an erroneous system, forget all those perils and neglect the political friendship of the only foreign nation, whose preponderancy, when the present war is brought to an end, will be sufficient to shelter them from the effects of any hostile demonstrations on the side of England.

In that respect we can not help repeating, that England, the enemy of the United States, before and after the cession of Louisiana, will for ever remain so, were she even to abandon all her possessions on the continent of America. Between two nations who own the same extraction, and who differ only by local habitation and by some slight distinctions, is always to be found one of the two opposite feelings which exist in private families, love or hatred, but never indifference. As long as the constitution of England remains monarchical, that nation will never give up the idea of reconquering those colonies, the ancient property of their ancestors. But if the consequences of the pretensions of En-

gland were to amount to open war, is it not most probable to suppose that she will be forced to submit to the natural superiority which the United States will draw from the regular augmentation of their population, and from the wealth of that population whose properties are unincumber'd with loans and poor rates?

Numerous difficulties will incessantly arise, as to the line of demarcation betwixt Canada and Louisiana, as it draws towards the Pacific Ocean. Will England remain in possession of the various ports and factories for the fur trade which she at present occupies? What stipulations will take place in regard to the navigation on the Mississippi, to a share of which the United States admitted England by the treaty of 1795? And lastly, will the migrations of the inhabitants of the United States to Canada be suffered to continue to the extent they at present have obtained? We shall pass by the first question, as requiring us to inter into particulars unfit for the present work, but we shall for a moment fix our attention on the other points.

It is contrary to the adopted policy of nations to allow strangers the interior navigation of their respective states; and both the banks of the Mississippi, together with all the lands through which it flows, belonging at present to the United States, it is clear that the *data* are no more what they were at the time of the first concession, when the upper part of the left bank was alone in the hands of

the Republick. But notwithstanding the principle of general policy, we may suppose that the private wishes of the inhabitants of that part of the country, will be against the interdiction : because the exclusion of English vessels would deprive them of a considerable competition, and thereby, at the same time, diminish the price of the exportation, and augment that of the importation goods, limited as they would be, to the monopoly of the small local trade : in that case, Congress might perhaps think prudent to sacrifice the general principle to such a superior advantage, if claimed by the states which border the Mississipi; and the navigation of that river might then not only be allowed to the English, but also opened to the merchantmen of every foreign nation.

The last point concerning the migrations to Canada is also of great importance. Congress, it has already been observed, sell their lands and sell them at a high price, no less than two dollars par acre, while the English government offers them for nothing. The lands thus given away are, it is true, generally of an inferior quality; those of Congress to the contrary most commonly good, owing partly to the difference of the climate, which is much less severe than above the great lakes; but the poor who are too often led astray by motives of self-interest, contemplate only the advantage of cultivating lands which have cost them no purchase price : none but a

small number among them being able to consider that the œconomy in the price of labour\*, the multiplicity, variety, and above all the abundance of the crops, not only compensate for, but even from the very first year may exceed the two dollars each acre would have cost. In the second year the farmer, now proprietor of land situated towards the south, on the best soil and in the finest climate of the United States, may boast of advantages for superior to any of those which the husbandman in the cold grounds of Canada can enjoy\*\*.

On the other hand if even the advantages were real, they can be of no long duration : for the distinction which England offers to the new Canadian settlers by submitting them to a small share only of the publick burdens is a momentary circumstance which will speedily cease. Some governments do adopt that plan when they wish to augment or create their population at the expense of a neighbouring state; but they seldom persist in it, and we have no doubt that England

\* The states of the West enjoy a difference of 50 p<sup>r</sup>. c<sup>t</sup>. in their favor above those of the North, on the costs of clearing the land.

\*\* The chief inconvenience of the lands situated too far to the north, is that the farmer being obliged to feed his cattle on dry food during the seven winter months, consumes all he has been reaping in the five summer months : this is not the case in the more genial climate of the western states, where the cattle is never shut up.

will have reason to repent, if she continues to act according to that system.

In the mean while should the United States feel their pride or their interest hurt by the preference their citizens give to a foreign country above their own, they may be comforted by the idea that sooner or later they will *recover these emigrants with the country they inhabit.*

Besides the differences which have been noticed concerning the boundaries, many others will arise in regard to trade and navigation, the seeds of which are all comprehended in the treaty of 1795. We have seen that the apprehension of a war was the only incitement on the side of the United States to the conclusion of a treaty so replete with humiliating conditions, and it is to be hoped that at the expiration of that treaty in 1807, the nation will profit of the alarms of the English, abolish those conditions and create new branches of trade with their neighbours.

Louisiana, in the hands of Spain, was of no other use but as one of those great devastations which in barbarous wars serve to put a considerable distance between a dangerous enemy and one's self: that it is to say that it served to separate the United States from Mexico by a vast uncultivated country; and the Spanish treasury instead of reaping any profits from the colony, made the same yearly sacrifices as England does for Canada: but a very essential difference

obtains between these two colonies in a military respect: Canada being an offensive post somewhat like a *tête de pont* on a rival territory, whilst Louisiana served only to shelter Spain from an attack in the heart of her richest colonies.

Consequently as long as Spain remained in possession of Louisiana, one of her chief objects was to hide from the Americans whatever attractions the country might have for them : in the first place the mines it possesses, and secondly the facility of its communication with Mexico. The knowledge of the road by land was kept a secret, as if it were a sort of a state mystery. That road is safe and short through upper Louisiana, following back the Ossage and Arkansa rivers till near Santa Fé; while the roads through lower Louisiana are extremely dangerous and in a great manner impracticable after four and twenty hours rain.

I cannot conclude without making some observations on the consequences this new extension of the territory of the United States may have on the original inhabitants of the country. The different compacts by which the European or colonial powers have till now acknowledged their mutual rights on the lands situated in the interior of North America, cannot be considered as absolute cessions of property. Thus, for example, a great part of Louisiana consists of lands which have not yet been obtained from the natives who live upon them : and in regard to those lands the United States have

undoubtedly only acquired the right of preemption, that is to say an exclusive privilege to purchase them. Many other interior lands which the United States had placed in their former geographical circumscription have likewise no other legal value, and resemble the patent by which pope Eugenius the fourth gave to the crown of Portugal all the discoveries it would make from the North Cape to the continent of the East Indies. No more do the records at Washington than the European ones, contain any charter of succession granted by the Indians for all the countries which at present form the immense domain the United States have attributed to themselves : the only deeds to be found are some parties evacuation of states already colonized and confirmed by treaties with the natives. But the rest can only be acquired by force or money.

In making these observations we have no other aim than to give an idea of the nature of the transactions which take place in respect to those countries, and it is far from our intention to throw any doubt on the legitimacy of the transactions already made, or to suggest the possibility of dangerous difficulties in regard to future ones.

After the Indians had either abandoned gratuitously or sold to the Europeans the land for their small settlements, they soon discovered that the white people would not be satisfied with a circumscribed district, but coveted the whole country.

Then they began to repent, and often expressed among themselves their sorrow at having delivered up for the paltry consideration of a few dollars, some fire-locks, stuffs or pernicious spirits, « the soil where rested the bones of « their fathers, and where once their sons had hoped to « hunt or to fight. » But those Indians resembled in this the more civilized nations of Europe. They moralized in their speeches, and lacked the courage to follow their own precepts.

But if on the one hand the legal deeds of property of the colonial powers on a great part of the lands in the interior of America are still to be acquired, it must be owned, on the other, that the natives themselves hold their lands by a very precarious tenure, their right being no other than that of the first occupier : for, wholly different in this respect from the ancient Mexicans and Peruvians, they have neither meliorated nor cultivated the soil; they have built no cities nor constructed any publick works. Very few among them are herdsmen though the country is very favorable to the rearing of flocks; instead of converting to the benefit of the community the rich soil of their fine country, they overrun it only in the character of hunters. To no society of man hath nature granted the right of wasting in the like manner any part of the globe, whilst other men claim it with a view to give the land its true destination, and seek through its produce their own subsistence. A single family

of these hunters occupies a space, which in Europe would be sufficient to insure to one or two thousand persons an honest livelihood by agriculture or any other useful industry.

No pretension is better founded on justice than that of cultivating nations on lands thus abusively possessed. But the United States not being at present in the necessity of extending their cultivation, it is no more than right that they should equitably indemnify the Indians that shall leave Louisiana at their desire, and particularly as these Indians, in seeking others deserts, will to all probability have bloody wars to wage with the tribes they will find already established there, and who will not tamely submit to divide their chase with the new comers.

And let not the friend of humanity fear that if, in the course of time, those obstinate hunters were to turn husbandmen, the encroachments of their white neighbours would have deprived them of soil sufficient for their wants. It is but too true that by disorders, debauchery and war, their numbers decrease in a much greater proportion than the inhabitants of the United States do augment; and more than one of those small nations has so far disappeared as to live at present only in the recollection of their neighbours. Besides, by far the greater part of those Indians, like all other savage nations, prefer with an invincible obstinacy their manner of living to ours, and

there is no probable reason for supposing that they ever will be tempted to exchange the one for the other.

I shall conclude these modest observations of a traveller by a short survey of the happiness enjoyed by the inhabitants of the American Republick, a happiness far superior in my eyes to any which ever fell to the lot of an ancient or modern nation, and owing to the circumstance without precedent, that no one class of people in any way useful to the community have the smallest reason to complain of their situation; the slaves, in those states where they do exist, being an exception which does not destroy the general rule.

The journeyman, one of the most unfortunate members of our political societies in Europe, obtains in America so advantageous a price for his labour, that he may, with some few privations, live the whole week on the produce of two or at most three days work; in some cases one day has proved sufficient. The women of the lower classes, who in Europe do not by far enjoy the same wages as the men, are here on a much more equal footing with them, and can on all occasions gain sufficient for their support. The artisan and manufacturer, having no other competition to fear but that of the European goods, the price of which is enhanced by the distance, the multiplied profits of the tradespeople, and the duties of the national customs, are also sure of considerable

profit on their handycraft. Lastly the husbandman is enabled to purchase a virgin soil for a price so trifling, that, with a little œconomy on the day labour of a too refined cultivation, he may with ease enjoy four times the income of an European farmer, while his land gains a ten or twenty fold value in an equal number of years. Such is the fate, such are the comforts men enjoy in that happy country, where alone can be applied with truth the observation of Montesquieu, *that a poor man is not he who possesses nothing, but he who does not work.*

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## CHAPTER XXXII.

*Of the Limits.—General Principles.—Disadvantages of imaginary Lines.—Greater still in the distant Countries.—The Lines drawn by Nature are the only good ones.—Inaccuracy in the Expressions of the Treaty of 1783.—The Line which divides the Lakes is false.—Plan for fixing the Boundaries.—Equity of the proposed Line.*

ONE of the chief objects of treaties of peace, when concluded between wise and upright nations, is to avoid future wars, or at least to delay their return as long as human foresight can permit.

According to that principle, the stipulations by which the respective boundaries of the different empires are to be determined, are undoubtedly those which ought to draw the chief attention of their Governments.

Experience has at present sufficiently demonstrated that all imaginary lines, whatever care be taken to describe them with exactness, or to trace them on maps, become on the slightest occasion a source of contest between Governments, of troubles and warfare between Nations.

It is not sufficient for the Governments to know their limits, or even to be able, in case of need, to determine them anew by the help of instruments; the people who live near the frontiers of the bordering countries, must also know their boundaries well enough to avoid all possible mistakes: otherwise those boundaries may be continually violated without any hostile views, and may moreover offer frequent opportunities to ambitious Governments of invading and usurping on their neighbour's territory.

The danger arising from uncertain limits is incomparably greater in colonies, situated at a considerable distance from the mother country. The most fatal strifes may have place between the inhabitants, before the necessary steps can be taken to prevent them and put an end to the main contest by an equitable decision.

The lines traced by Nature, which are the course of rivers or well marked chains of mountains, are those which ought to be chosen for demarcation lines. There is nothing fictitious in them; they are firm, immutable, known by every body without the aid of mathematical operations. No one

can infringe them without a determination to do so, and ignorance can furnish no pretences to dishonesty.

All those necessary conditions of evidence, in demarcation lines between the territories of different powers, were overlooked or neglected in fixing the limits between the English possessions and Louisiana, and the limits between the United States, the English possessions and Louisiana.

At the peace of 1783 there were no well informed men living in Canada or in the Western States but who knew that the sources of Mississippi are situated *more than two degrees below the most southern part of the Lake of the Woods*. And it has nevertheless been established by the second article of the treaty between England and the United States, that the possession of the two powers should be divided by a line drawn from the extremity of the Lake of the Woods and running due west until it meets the Mississippi river. In this article therefore we see the chief inconvenience of a fictitious line, of which no exact points determine the direction, added to the greatest incorrectness and the most complete ignorance of locality. For in following this imaginary line in the given direction, we would arrive at the Pacific ocean without having met with any of the branches of the Mississippi.

The imaginary line running through the middle of the lakes Ontario, Erie etc. etc., is no less fallacious than the

one already mentioned. The vessels navigating on those lakes can never be certain whether they are within or without their respective boundaries, and that line is consequently no better than a deception. The most natural limits of maritime powers are at the distance of a cannon shot from their mutual shores; all other pretensions are founded neither on nature nor on justice.

Where islands are to be found they offer real fixed points, and their property must be determined according to the coast the nearest to which they are placed.

If a topographical knowledge of the country and the inspection of a map were not sufficient to show that the limits between Canada and the United States were from the beginning ill determined, the perpetual quarrels which arise between the inhabitants of the two frontiers, the repeated unsatisfactory explanations between the two Governments and the sending of commissaries, every now and then, to settle the differences, would be clear proofs of what we have advanced.

Not having determined which of the two Sainte-Croix rivers (there being two which bear the same name at a few leagues distance from one another) was to form the boundary, is a first cause of obscurity, and *the line to be drawn from the sources of that river to the hills which divide the waters that run in the Atlantic ocean from those*

that flow in the river *St Lawrence*, is so confused and vague a determination that each of the two parties may explain it according to his private interest. The most natural, and clearest limit would be the *St John's* river in all its length, then the *Pistole* river, or the *rivière des Vases*, which are no more than a mile or two from the sources of the *St John*, and lastly the river *St Lawrence* till the lake *Ontario*. By those means no arbitrary interpretations could take place, and the difference of territory in favor of the United States would be fully compensated in favor of England, by the possession of boundaries traced as it were by Nature herself. Should, however, England not wish to abandon so considerable a territory, nevertheless the *St John's* river ought to have been or still to be chosen for the limits, because its course is the longest, and its sources are so near the hills which divide the waters and which, by the treaty, are in fact the demarcation line between Canada and the United States, that posts or a ditch or any marks whatever may be placed with ease and at a small expense.

I have already shown that the north-west boundary between the English possessions and the United States is absolutely false. It is at the high country situated on the plateau A that the point should have been fixed, for there the grand distribution of the waters takes place, the northern ones running towards the Frozen sea, the

eastern ones to the Atlantic, and the southern to the Mexican gulph\*.

The line ought therefore not to have gone farther than the most western part of the lake Superior, to have followed West bay, mounted the river Saint-Louis to its source, and from thence gained Cold river, which is separated from the former only by a short carrying-place of two miles and whose waters fall into the Mississippi.

That demarcation would be the more equitable as it would give the Americans the sources of all the rivers that water their territory, and an uninterrupted outlet from the north to the south in the Mexican gulph, the eastern bank of the Mississippi being, from Cold river to Florida, the boundary between the possessions of H. M. Cath. Majesty and the United States\*\*.

\* The possession of this *plateau* will be the future cause of great bloodshed unless the powers who divide this continent take very wise precautionary measures.

\*\* If the government of the United States be wise, now that they possess Louisiana, they will take great care not to exceed the limits, traced to them by nature, I mean the Mississippi. As for Florida instead of *adding* that country to their new acquisitions, they may endeavour to get it from Spain as an *exchange* for their possessions on the right bank of the Mississippi.

According to all reports, the population of America doubles every twenty

As to the Islands scattered on the surface of the river, they are all very low, uninhabitable and can never create the smallest difficulty, neither of the two nations having the least interest in their possession.

years. I even think that by reckoning the immigrations from Europe, that calculation is rather below the mark, but I am far from thinking that her power augments in the same proportion, as she daily acquires lands far beyond what the increase of her population might require.

The United States have already too much land. The southern and central States have immense possessions in their backs, which by the quality of the soil and the beauty of the climate attract continual settlers. But such is the character of man; in the midst of the greatest opulence, he never thinks himself rich enough.

By the manner the Americans disperse, and sell their settlements, as soon as they find an opportunity, it would seem that their immense territories appear still too small for them. Virginia migrates to Kentucky; Georgia to Tennessee; the northern and western states to both: Kentucky situated in the midst of the deserts emigrates already to the Miamies and there seeks the lakes, the streights, and even the Missouri. Thusby extending they continually weaken themselves. This goes so far that in some parts of the western states which have the name of being inhabited, you may run over space of a hundred square miles without finding five hundred men able to bear arms, and when formed, all these small bodies would have the greatest trouble to rejoin an account of the difficulty and scarcity of roads and provisions.

We learn by history that the northern nations have at all times

The disposition I have proposed not giving to the Americans any part of the lands water'd by the rivers which run towards Hudson's bay or the Frozen sea, would prevent for the future all those numerous contests and discussions which soon or late cannot fail to draw the people in wars without end.

conquered those of the south. From this fact we may draw an inference as to the advantage which the northern and eastern states, who join the English possessions in Canada and who have a tendency to a monarchical government, shall one day possess over the western and southern ones. Their population is more concentrated; the Canadians, with whom they probably will unite, are a hardy and courageous people; they possess the sources of all the rivers which run to the south. What means shall the southern states have to defend themselves in case of an attack, if they continue to scatter their subjects as they now do, effeminate as they will be by the effects of luxury and a warm climate? The modern Tartars of America will come down upon them with the waters of their rivers and conquer them with facility.

To those state reasons motives of personal interest may be added. In the United States of America, every head of a family possessing a little fortune and some foresight, never fails to purchase lands in the interior, in the expectation that their value will be annually enhanced by the increase alone of the population, and hoping to leave by that means an independant fortune to his children. Those lands are still at a very low price on account of the immense possessions the United States have recently acquired in the Miamis and in Indiana. What

All that part of the continent being absolutely unknown at the time the last peace was concluded, it was mutually acknowledged that no line of limits could be determined, admitting even the same inaccuracy as in the former case. Its determination was therefore left to some later time. England has since then made her profit of this state of indetermined demarcation, and the agents of her trade as well as her troops have pushed forward till near the sources of the Missouri.

But though few enlightened travellers have as yet penetrated in those vast solitudes, still a number of individuals have visited them sufficient to give a full knowledge of the direction of the mountains and of the course of the waters.

will be the consequence if once the Americans have no limits? and this will certainly be the case if ever they pass the river. The population will sink to nothing in an incommensurable space of land; they will wander here and there; the soil will have no value; the difference of climates and interests, and the distance they will be from the supreme authorities, will speedily dispose the minds to reject them and to rend asunder the ties by which even at present they are but too slightly bound.

The western states, prompted by self-interest as well as by reason, ought therefore to stop their progress and to concentrate between the lakes and the Mississippi, if they wish to keep up their independence and not to be one day conquered, deceived or destroyed.

In the year 1789 Mackenzie penetrated to the Frozen sea by following the course of the rivers, and in tracing his route, he may be said to have marked as truly the line which ought to separate upper Louisiana from upper Canada, as if he had travelled for that purpose alone.

That line must begin where the limits of the United States finish, that is to say on the lake Superior at the point where the great carrying place begins; it must then follow towards the north that long suite of small lakes which form 72 carrying places; from thence gain the lake of the Woods; from the lake of the Woods follow the waters which join that lake to the lake Winipig. Then to the lake of the Cedar, gain the Delicious, Pin and Beaver lakes, till the carrying place called 370 *toises*, were the waters that fall in Hudson's bay separate from those which run to the Frozen sea. Then follow the Churchill river, the White Bear and Buffalo lakes, the Arabasca river, the Arabasca lake, the river of the Slaves lake, and lastly the river which falls in the Frozen sea. See Mackenzie's general Map.

That line would be natural, simple and founded on the most equitable basis. Both England and Spain would enjoy, as to lands and navigation whatever they have a right to expect, and all pretences for future misunderstanding would be effectually removed. It is needless to

own that those reflections and particulars are no more than general ideas which require to be cleared up and perhaps rectified on the spot. But the writer is convinced that they are founded on principles the truth of which and consequently the wise policy must remain undisputed.



## CHAPTER XXXIII.

*Military Topography.—Of the Frontiers which must one day serve for Barriers between the Western States and those of the Atlantic.—Projected Line of Frontiers.—First part.—Second part.—Third part.—Fourth part.—Roads by which it is cut.—Point where they end.—Line of Operations.—Right line.—Center line.—Left line.—They have all the same defiles to cross.—Advantages of the Right line.—Difficulties of the Center line.—Advantages of the Left line above the center one.—Comparative Force of those Frontiers.—First position.—Second position.—Third position.—Fourth position.—Observation on the Choice of a Place to serve as a Dépôt.—Face of the country from Knoxville to the sea.—No Roads.—Conclusion.—The advantages of this Frontier are not only military.—Probable Fate of the Atlantic States.*

IN beginning the following chapter I expect my readers to lay before their eyes a detailed map of that part of America, and to recall with attention to their memory the description we have given of part of the Alleghany mountains, of the course

of the Ohio, of the Mississippi, and of the ports which are to be found on its two banks. They must also suppose the Western states separated from those of the Atlantic. Without those preliminaries, the following contents would appear unintelligible to them.

My intention is not to enter in minute particulars respecting military positions and camps. This would require a greater knowledge of the country than I possess, and would besides be superfluous, as the choice of camps depends on the movements of the enemy and on a thousand other circumstances. I only wish to show in general how the Western states may, in case of need, defend themselves and at the same time cover Louisiana.

The principal or absolute strength of a frontier depends on the natural obstacles it opposes to the advance of an enemy : such as hills, rivers, woods, passes, etc.

The comparative strength consists in its distance from the depots and from the magazines the army is to defend, in the number of points on which it is vulnerable and in its position in regard to the line of operations, it being a general rule that the shorter the line on which an army operates, the more chance it has of getting the better of its adversary.

The natural line which the Western states must adopt for their limits and barrier, commences at the falls of the

Niagara and runs from thence in a more or less inclined direction to the bay of Appalache, following the *plateaux* or the hills which divide the waters of the Atlantic from those of the Mexican gulph.

I shall divide this line in four parts, in relation to the different points on which it may be attacked by the Atlantic states.

The first part extends from Niagara to the pass of the Juniata and crosses the *Plateau* called *Twenty three miles*, by which the waters of the river Alleghany are divided from those of the Susquehana, from whence it runs to the beginning or visible part of the Alleghany mountains. This part covers the country watered by the Alleghany from its source to Pittsburg. Its length is about 250 miles.

In the second part, the line follows the tops of the hills, cuts the pass of Sweetspring and goes to Montgomery's court house, near the sources of the great Kanhaway. It covers the part of Virginia situated between the mountains and the river Ohio, which is watered by the Monongahela and the little Kanhaway. Its length is about 240 miles.

In the third part, the frontier line begins at Montgomery's court house, and continues following the tops of the mountains till the sources of the river Appalache, at the point where the hills turn to divide the waters of the Mobile from those of the river Appalache. This part covers all the country watered by the rivers Cumberland and Tennessee : it is about 260 miles long.

In the fourth, the line follows the river Appalache from its sources to the point where it falls in the Mexican gulph. This part covers the countries of the Areks, the Cherokees, the Chactaws and the Chickasaws, the lands formerly claimed by the United States, situated between the 32<sup>d</sup> and 31<sup>st</sup> degrees of latitude and Western Florida. Its length is about 380 miles.

This frontier line, the whole length of which surpasses four hundred leagues, has no more than seven roads on which a body of troops can act.

The first road comes from Pennsylvania and goes to Pittsburg. It begins at Philadelphia and passes by Lancaster, Carlisle, Shippenburg and Bedford.

The second comes from Maryland and goes also to Pittsburg. It begins at Baltimore, passes through Frederick'stown, Hagerstown, Cumberland fort and Bedford, where it joins the great communication from Pennsylvania.

The third comes from Virginia and goes to Kentucky. It begins at Richmond, passes by Charlotte'stown, Haunton, Hotspring, Sweetspring, to the sources of Green river; follows the waters of that river, those of the great Kanhaway and of the Ohio, going from thence to the state of Kentucky.

The fourth comes also from Virginia, but takes the direction of the state of Tennessee. It begins, like the former, at Richmond, crosses Powhalton, Prince Edward, New London,

Liberty, Bighick, Montgomery's court house, Wythe, Abington and Knoxville.

The fifth comes from North Carolina and goes also to Tennessee. It begins at Raleigh, Hillsborough, Martin'stown, Salem, Bethania, Grayson, and falls at Abington in the great communication of Virginia with Tennessee.

The sixth comes from South Carolina. It begins at Columbia, passes by Wimesborough, Pinckneytown, Spartan, Morgantown, Buncomb, Servier's court house, follows the right bank of French broad river, and falls at Jefferson in the high road from Virginia to Tennessee.

The seventh comes from Georgia. It begins at Augusta, passes through Peterborough, Elberton, Franklin, Pendleton, Greenville, and falls above Morgan'stown in the road that comes from South Carolina.

Each of these roads is fit for carriages and is traversed by cross roads which communicate from one state to another.

By what has been said of these roads falling into one another, it may be seen that the points where this frontier line may be attacked, are only three in number, viz : the sources of the Ohio, those of the great Kanaway and those of the river Tennessee. The first we shall call the right line, the second the center line, and last the left line.

Philadelphia and Baltimore are, on the right line, the points from which the enemy must depart. The distance from these

two cities to the nearest part of the western frontiers is 120 miles.

Richmond is the point of departure of the center line. It lays at 400 miles from the frontier.

Raleigh, Colombia and Augusta are the points of departure of the left line; each of those cities lays at about 360 miles from the entrance of the Western states.

The army once arrived at the foot of the mountains, whichever of these three roads it has followed, finds the same sort of country to cross. Everywhere the same gaps or passes succeeding one another for a space of forty or fifty miles.

The right line is the shortest; it passes through the most cultivated part of the Republick, and offers the greatest facilities for the transports of the army. The center line is the longest and has the worst roads. The left line is rather longer than the right; the country is less cultivated and less inhabited; but the roads are more numerous and better. The right and left line are consequently those on which the enemy may be expected to make the greatest efforts. Let us now see what means of defense this frontier possesses.

Considering the strength of the line, its direction, the course of the rivers, the situation of the hills, and the impediments that grow out of the nature of the country alone, nothing will appear easier than its defense, provided the principal position be occupied with some little intelligence.

The first position is between the lake Erie and the sources of the river Alleghany. Two small forts very well placed exist there at present : the one, called *Presqu'île*, is on the banks of the lake Erie; and the other, *the Ox*, is near the principal source of the Alleghany. This position prevents an enemy from penetrating to Pittsburg by the open space between the hills and Niagara. It is easy to be defended, the enemy having behind him no place fit for a *dépôt*, and the country being very woody, the smallest body of regular troops with some Indian natives would be sufficient to guard it.

The second position is Pittsburg, which is the true Key of this frontier. One single look on the map will suffice to show all that nature has done to strengthen Pittsburg. Its situation at the point where the Alleghany and Monongahela join to form the Ohio; covered by mountains and passes without end, backed by the most astonishing navigation canal in the universe, by which all sorts of provisions and reinforcements can arrive, Pittsburg may truly be called impregnable.

As for the third position, a minute inspection of the different spots with military eyes, can alone decide between the confluence of the Green Briar river with the great Kanhaway, and the *Plateau* of Golay, from whence flow the sources of the Green Briar. For my part I should prefer the first, which I conclude to be in greater harmony with the general system

of defense, occupying however at the same time the *Plateau* with a post and placing an intermediate body between itself and the pass of Sweetspring.

The fourth position must be sought near the sources of the river Tennessee; but not having visited myself that spot, I can only speak of it from the inspection of maps and the informations received from some able inhabitants of the country.

All the roads which run either from North Carolina, South Carolina, or Georgia, unite in two points : at Wataga situated at the confluence of the rivers Wataga and Holsten; and at Servier's court house, situated at the confluence of Lime stone creek and French broad river. The distance of those two points may be about 40 or 45 miles. As to the face of the country it is covered with hills and woods, and is generally of a very difficult access. The manner of occupying this position on a large scale, would be to fill all the mentioned space with troops, the left wing at Wataga and the right at Servier. The *dépôt* should be placed at Long-Island, a few miles below Wataga on the river Holsten.

If I am asked why, I do not rather place the *dépôt* at Knoxville, which is a central point where all the roads and waters join, I shall answer that Knoxville, being one hundred miles farther from the line of operations than Long Island, would lengthen that line too much, and consequently deprive

that frontier of all the advantages it has received from Nature for its defense : besides which Long Island is more favorably placed for communications with the Green Briar and Pittsburg.

From the sources of the river Tennessee to the sea, this part of the frontier is sheltered by the principal chain of mountains which follows at a very small distance the left bank of the river Appalache. This line not being at present crossed by any road coming from Georgia, it is not possible so determine the fittest military position, as the choice will be greatly determined by the direction the future roads shall take.

The result of what has been said is that, notwithstanding the length of the frontier line, it can only be attacked on a small number of points, that the Western states can unite on those points a body of troops at a much shorter notice than their enemies, who are at a far greater distance from their depots, and require considerable magazines, artillery and horses.

The frontier line I propose has not only the advantage of being strong, in a military sense, but is also remarkable by the valuable division of the waters of the Atlantic from those of the Mexican gulph, which division gives unchangeable limits, *the mountain countries alone never changing their nature*. Moreover it gives to the Western states four great outlets to the sea : the Mississippi, the Mobile, Pensacola and

Sainte-Rose; advantage which will for ever prevent these states from becoming tributary to those of the Atlantic, and which contrasts most strikingly with the situation of Canada, whose only outlet being the river St. Lawrence, must soon or late fall under the dependance of the States of the East.

Whoever weighs carefully the circumstances, the topographical situation of the frontier line, the disposition of the inhabitants and their love of liberty, will easily comprehend that the Atlantic states, far from attacking them, will on the contrary be forced to court their friendship, if they value their own political independance and do not wish to be one day conquered or pushed back to the sea : for when two nations possess, one the coasts and the other the plains, the former must inevitably embark or submit.

From thence I conclude that the Western states of the North American republick must unite themselves with Louisiana and form in the future one single compact nation; else that colony to whatever power it shall belong will be conquered or devoured.

I have now shown what Nature has done for the independance, peace and safety of the Western states; I say their safety, *for it is the situation of the frontiers which makes the safety of Empires.*

THE END.

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