CHAPTER VI.

The party increase in the favour of the Mandans—Description of a buffaloe dance—Medicine dance—The fortitude with which the Indians bear the severity of the season—Distress of the party for want of provisions—The great importance of the blacksmit in procuring it—Depredations of the Sioux—The homage paid to the medicine stone—Summary act of justice among the Minnetarees—The process by which the Mandans and Ricaras make beads—Character of the Missouri, of the surrounding country, and of the rivers, creeks, islands, &c.

Friday, 28th. The wind continued high last night, the frost severe, and the snow drifting in great quantities through the plains.

Saturday, 29th. There was a frost fell last night nearly one quarter of an inch in depth, which continued to fall till the sun had gained some height: the mercury at sunrise stood at 9º below 0: there were a number of Indians at the fort in the course of the day.

Sunday, 30th. The weather was cold, and the thermometer 20º below 0. We killed one deer, and yesterday one of the men shot a wolf. The Indians brought corn, beans, and squashes, which they very readily gave for getting their axes and kettles mended. In their general conduct during these visits they are honest, but will occasionally pilfer any small article.

Monday, 31. During the night there was a high wind which covered the ice with hillocks of mixed sand and snow: the day was however fine, and the Indians came in great numbers for the purpose of having their utensils repaired.

Tuesday, January 1, 1805. The new year was welcomed by two shot from the swivel and a round of small arms. The weather was cloudy but moderate; the mercury which at sunrise was at 18º, in the course of the day rose to 34º above 0: towards evening it began to rain, and at night we
had snow, the temperature for which is about 0. In the morning we permitted sixteen men with their music to go up to the first village, where they delighted the whole tribe with their dances, particularly with the movements of one of the Frenchmen who danced on his head. In return they presented the dancers with several buffaloe robes and quantities of corn. We were desirous of showing this attention to the village, because they had received an impression that we had been wanting in regard for them, and because they had in consequence circulated invidious comparisons between us and the northern traders: all these however they declared to captain Clarke, who visited them in the course of the morning, were made in jest. As captain Clarke was about leaving the village, two of their chiefs returned from a mission to the Grosventres or wandering Minnetarees. These people were encamped about ten miles above, and while there one of the Ahnahaways had stolen a Minnetaree girl: the whole nation immediately espoused the quarrel, and one hundred and fifty of their warriors were marching down to revenge the insult on the Ahnahaways. The chief of that nation took the girl from the ravisher, and giving her to the Mandans requested their intercession. The messengers went out to meet the warriors, and delivered the young damsel into the hands of her countrymen, smoked the pipe of peace with them, and were fortunate enough to avert their indignation and induce them to return. In the evening some of the men came to the fort and the rest slept in the village. Pocapsahe also visited us and brought some meat on his wife's back.

**Wednesday, January 2.** It snowed last night, and during this day the same scene of gayety was renewed at the second village, and all the men returned in the evening.

**Thursday 8.** Last night it became very cold, and this morning we had some snow: our hunters were sent out for buffaloe, but the game had been frightened from the river by the Indians, so that they obtained only one: they however
killed a hare and a wolf. Among the Indians who visited us was a Minnotaree who came to seek his wife: she had been much abused and came here for protection, but returned with him, as we had no authority to separate those whom even the Mandan rites had united.

Friday 4. The morning was cloudy and warm, the mercury being 28° above 0: but towards evening the wind changed to northwest, and the weather became cold. We sent some hunters down the river, but they killed only one buffalo and a wolf. We received the visit of Kagohami who is very friendly, and to whom we gave a hankerchief and two files.

Saturday 5. We had high and boisterous winds last night and this morning: the Indians continue to purchase repairs with grain of different kinds. In the first village there has been a buffalo dance for the last three nights, which has put them all into commotion, and the description which we received from those of the party who visited the village and from other sources, is not a little ludicrous: the buffalo dance is an institution originally intended for the benefit of the old men, and practised at their suggestion. When buffalo becomes scarce they send a man to harangue the village, declaring that the game is far off and that a feast is necessary to bring it back, and if the village be disposed a day and place is named for the celebration of it. At the appointed hour the old men arrive, and seat themselves crosslegged on skins round a fire in the middle of the lodge with a sort of doll or small image, dressed like a female, placed before them. The young men bring with them a platter of provisions, a pipe of tobacco, and their wives, whose dress on the occasion is only a robe or mantle loosely thrown round the body. On their arrival each youth selects the old man whom he means to distinguish by his favour, and spreads before him the provisions, after which he presents the pipe and smokes with him. Mox senex vir simulacrum parvae puellae ostensit. Tune egrediens eceiu jecit

Sunday 6. A clear cold morning with high wind: we caught in a trap a large gray wolf, and last night obtained in the same way a fox who had for some time infested the neighbourhood of the fort. Only a few Indians visited us to-day.

Monday 7. The weather was again clear and cold with a high northwest wind, and the thermometer at sunrise 22° below 0: the river fell an inch. Shahaka the Big White chief dined with us, and gave a connected sketch of the country as far as the mountains.

Tuesday 8. The wind was still from the northwest, the day cold, and we received few Indians at the fort. Besides the buffaloe dance we have just described, there is another called medicine dance, an entertainment given by any person desirious of doing honour to his medicine or genius. He announces, that on such a day he will sacrifice his horses, or other property, and invites the young females of the village to assist in rendering homage to his medicine; all the inhabitants may join in the solemnity, which is performed in the open plain and by daylight, but the dance is reserved for the virgins or at least the unmarried females, who disdain the incumbrance or the ornament of dress. The feast
is opened by devoting the goods of the master of the feast to his medicine, which is represented by a head of the animal itself, or by a medicine bag if the deity be an invisible being. The young women then begin the dance, in the intervals of which each will prostrate herself before the assembly to challenge or reward the boldness of the youth, who are often tempted by feeling or the hopes of distinction to achieve the adventure.

Wednesday 9. The weather is cold, the thermometer at sunrise 21° below 0. Kagohami breakfasted with us, and captain Clarke with three or four men accompanied him and a party of Indians to hunt, in which they were so fortunate as to kill a number of buffaloe: but they were incommode by snow, by high and squally winds, and by extreme cold: several of the Indians came to the fort nearly frozen, others are missing, and we are uneasy, for one of our men who was separated from the rest during the chase has not returned: In the morning,

Thursday 10, however, he came back just as we were sending out five men in search of him. The night had been excessively cold, and this morning at sunrise the mercury stood at 40° below 0, or 72 below the freezing point. He had, however, made a fire and kept himself tolerably warm. A young Indian, about thirteen years of age, also came in soon after. His father who came last night to inquire after him very anxiously, had sent him in the afternoon to the fort: he was overtaken by the night, and was obliged to sleep on the snow with no covering except a pair of antelope skin moccasins and leggings and a buffalo robe: his feet being frozen we put them into cold water, and gave him every attention in our power. About the same time an Indian who had also been missing returned to the fort, and although his dress was very thin, and he had slept on the snow without a fire, he had not suffered the slightest inconvenience. We have indeed observed that these Indians support the rigours of the season in a way which we had hitherto thought
impossible. A more pleasing reflection occurred at seeing the warm interest which the situation of these two persons had excited in the village, the boy had been a prisoner and adopted from charity, yet the distress of the father proved that he felt for him the tenderest affection, the man was a person of no distinction, yet the whole village was full of anxiety for his safety, and when they came to us, borrowed a sleigh to bring them home with ease, if they survived, or to carry their bodies if they had perished.

Friday 11. We despatched three hunters to join the same number whom we had sent below about seven miles to hunt elk. Like that of yesterday the weather to-day was cold and clear, the thermometer standing at 38° below 0. Poscopsahe and Shotahawroro visited us, and past the night at the fort.

Saturday 12. The weather continues very cold, the mercury at sunrise being 20° below 0. Three of the hunters returned, having killed three elk.

Sunday 13. We have a continuation of clear weather, and the cold has increased, the mercury having sunk to 34° below 0. Nearly one half of the Mandan nation passed down the river to hunt for several days; in these excursions men, women and children, with their dogs, all leave the village together, and after discovering a spot convenient for the game, fix their tents; all the family bear their part in the labour, and the game is equally divided among the families of the tribe. When a single hunter returns from the chase with more than is necessary for his own immediate consumption, the neighbours are entitled by custom to a share of it: they do not however ask for it, but send a squaw, who without saying any thing, sits down by the door of the lodge till the master understands the hint, and gives her gratuitously a part for her family. Chaboneau who with one man had gone to some lodges of Minnetarees near the Turtle mountain, returned with their faces much frostbitten. They had
been about ninety miles distant, and procured from the inhabitants some meat and grease, with which they loaded the horses. He informs us that the agent of the Hudson bay company at that place, had been endeavouring to make unfavourable impressions with regard to us on the mind of the great chief, and that the N. W. company intend building a fort there. The great chief had in consequence spoken slightly of the Americans, but said that if we would give him our great flag he would come and see us.

Monday 14. The Mandans continue to pass down the river on their hunting party, and were joined by six of our men. One of those sent on Thursday returned, with information that one of his companions had his feet so badly frost-bitten that he could not walk home. In their excursion they had killed a buffaloe, a wolf, two porcupines and a white hare. The weather was more moderate to-day, the mercury being at 16° below 0, and the wind from the S. E. we had however some snow, after which it remained cloudy.

Tuesday 15. The morning is much warmer than yesterday, and the snow begins to melt, though the wind after being for some time from the S. E. suddenly shifted to N. W. Between twelve and three o'clock A. M. there was a total eclipse of the moon, from which we obtained a part of the observation necessary for ascertaining the longitude.

We were visited by four of the most distinguished men of the Minnetarees, to whom we showed marked attentions, as we knew that they had been taught to entertain strong prejudices against us; these we succeeded so well in removing, that when in the morning.

Wednesday 16, about thirty Mandans, among whom six were chiefs came to see us, the Minnefarees reproached them with their falsehoods, declaring that they were bad men and ought to hide themselves. They had told the Minnetarees that we would kill them if they came to the fort, yet on the contrary they had spent a night there and been
treated with kindness by the whites, who had smoked with them and danced for their amusement. Kagohami visited us and brought us a little corn, and soon afterwards one of the first war chiefs of the Minnetarees came accompanied by his squaw, a handsome woman, whom he was desirous we should use during the night. He favoured us with a more acceptable present, a draft of the Missouri in his manner, and informed us of his intention to go to war in the spring against the Snake Indians; we advised him to reflect seriously before he committed the peace of his nation to the hazards of war; to look back on the numerous nations whom war has destroyed, that if he wished his nation to be happy he should cultivate peace and intercourse with all his neighbours, by which means they would procure more horses, increase in numbers, and that if he went to war he would displease his great father the president, and forfeit his protection. We added that we had spoken thus to all the tribes whom we had met, that they had all opened their ears, and that the president would compel those who did not voluntarily listen to his advice. Although a young man of only twenty-six years of age, this discourse seemed to strike him. He observed that if it would be displeasing to us he would not go to war, since he had horses enough, and that he would advise all the nation to remain at home, until we had seen the Snake Indians, and discovered whether their intentions were pacific. The party who went down with the horses for the man who was frostbitten returned, and we are glad to find his complaint not serious.

Thursday 17. The day was very windy from the north; the morning clear and cold, the thermometer at sunrise being at 0: we had several Indians with us.

Friday 18. The weather is fine and moderate. Messrs. Laroche and M'Kenzie, two of the N. W. company's traders, visited us with some of the Minnetarees. In the afternoon two of our hunters returned, having killed four wolves and a blaireau.
Saturday 19. Another cloudy day. The two traders set out on their return, and we sent two men with the horses thirty miles below to the hunting camp.

Sunday 20. The day fair and cold. A number of Indians visit us with corn to exchange for articles, and to pay for repairs to their household utensils.

Monday 21. The weather was fine and moderate. The hunters all returned, having killed during their absence three elk, four deer, two porcupines, a fox and a hare.

Tuesday 22. The cold having moderated and the day pleasant, we attempted to cut the boats out of the ice, but at the distance of eight inches came to water, under which the ice became three feet thick, so that we were obliged to desist.

Wednesday 23. The cold weather returned, the mercury having sunk 2° below 0, and the snow fell four inches deep.

Thursday 24. The day was colder than any we have had lately, the thermometer being at 12° below 0. The hunters whom we sent out returned unsuccessful, and the rest were occupied in cutting wood to make charcoal.

Friday 25. The thermometer was at 25° below 0, the wind from N. W. and the day fair, so that the men were employed in preparing coal, and cutting the boats out of the ice. A band of Assiniboins headed by their chief, called by the French, Son of the Little Calf, have arrived at the villages.

Saturday 26. A fine warm day: a number of Indians dine with us: and one of our men is attacked with a violent pleurisy.

Sunday 27. Another warm and pleasant day: we again attempted to get the boat out of the ice. The man who has the pleurisy was blooded and sweated, and we were forced to take off the toes of the young Indian who was frost-bitten some time since. Our interpreter returned from the villages, bringing with him three of Mr. Laroche's horses which he had sent in order to keep them out of the way of the Assiniboins, who are very much disposed to steal, and who have just returned to their camp.
Monday 28. The weather to-day is clear and cold: we are obliged to abandon the plan of cutting the boat through the ice, and therefore made another attempt the next day,

Tuesday 29, by heating a quantity of stones so as to warm the water in the boat, and thaw the surrounding ice: but in this too we were disappointed, as all the stones on being put into the fire cracked into pieces: the weather warm and pleasant: the man with the pleurisy is recovering.

Wednesday 30. The morning was fair, but afterwards became cloudy. Mr. Laroche the trader from the northwest company paid us a visit, in hopes of being able to accompany us on our journey westward, but this proposal we thought it best to decline.

Thursday 31. It snowed last night, and the morning is cold and disagreeable, with a high wind from the northwest: we sent five hunters down the river. Another man is taken with the pleurisy.

Friday, February 1. A cold windy day: our hunters returned having killed only one deer. One of the Minnetaree war chiefs, a young man named Maubuksheahokeah or Seeing Snake, came to see us and procure a war hatchet: he also requested that we would suffer him to go to war against the Sioux and Ricaras who had killed a Mandan some time ago: this we refused for reasons which we explained to him. He acknowledged that we were right, and promised to open his ears to our counsels.

Saturday 2. The day is fine: another deer was killed. Mr. Laroche who has been very anxious to go with us left the fort to-day, and one of the squaws of the Minnetaree interpreter is taken ill.

Sunday 3. The weather is again pleasant: disappointed in all our efforts to get the boats free, we occupied ourselves in making iron spikes so as to prize them up by means of long poles.

Monday 4. The morning fair and cold, the mercury at sunrise being 18º below 0, and the wind from the northwest.
The stock of meat which we had procured in November and December being now nearly exhausted, it became necessary to renew our supply; captain Clarke therefore took eighteen men, and with two sleighs and three horses descended the river for the purpose of hunting, as the buffaloe has disappeared from our neighbourhood, and the Indians are themselves suffering for want of meat. Two deer were killed to-day but they were very lean.

Tuesday 5. A pleasant fair morning with the wind from northwest: a number of the Indians come with corn for the blacksmith, who being now provided with coal has become one of our greatest resources for procuring grain. They seem particularly attached to a battle axe, of a very inconvenient figure: it is made wholly of iron, the blade extremely thin, and from seven to nine inches long; it is sharp at the point and five or six inches on each side, whence they converge towards the eye, which is circular and about an inch in diameter, the blade itself being not more than an inch wide, the handle is straight, and twelve or fifteen inches long; the whole weighing about a pound. By way of ornament, the blade is perforated with several circular holes. The length of the blade compared with the shortness of the handle render it a weapon of very little strength, particularly as it is always used on horseback: there is still however another form which is even worse, the same sort of handle being fixed to a blade resembling an espontoon.

Wednesday, February 6. The morning was fair and pleasant, the wind N. W. A number of Indian chiefs visited us and withdrew after we had smoked with them contrary to their custom, for after being once introduced into our apartment they are fond of lounging about during the remainder of the day. One of the men killed three antelopes. Our blacksmith has his time completely occupied, so great is the demand for utensils of different kinds. The Indians are particularly fond of sheet iron, out of which they form points for arrows and instruments for scraping hides, and when
the blacksmith cut up an old cambouse of that metal, we obtained for every piece of four inches square seven or eight gallons of corn from the Indians, who were delighted at the exchange.

Thursday 7. The morning was fair and much warmer than for some days, the thermometer being at 18° above 0, and the wind from the S. E. A number of Indians continue to visit us; but learning that the interpreter's squaws had been accustomed to unbar the gate during the night, we ordered a lock put on it, and that no Indian should remain in the fort all night, nor any person admitted during the hours when the gate is closed, that is from sunset to sunrise.

Friday 8. A fair pleasant morning, with S. E. winds. Pocopsahe came down to the fort with a bow, and apologized for his not having finished a shield which he had promised captain Lewis, and which the weather had prevented him from completing. This chief possesses more firmness, intelligence, and integrity, than any Indian of this country, and he might be rendered highly serviceable in our attempts to civilize the nation. He mentioned that the Mandans are very much in want of meat, and that he himself had not tasted any for several days. To this distress they are often reduced by their own improvidence, or by their unhappy situation. Their principal article of food is buffaloe-meat, their corn, beans, and other grain being reserved for summer, or as a last resource against what they constantly dread, an attack from the Sioux, who drive off the game and confine them to their villages. The same fear too prevents their going out to hunt in small parties to relieve their occasional wants, so that the buffaloe is generally obtained in large quantities, and wasted by carelessness.

Saturday 9. The morning was fair and pleasant, the wind from the S. E. Mr. M'Kenzie from the N. W. company establishment visited us.

Sunday 10. A slight snow fell in the course of the night, the morning was cloudy, and the northwest wind blew so
high that although the thermometer was 18° above 0, the
day was cooler than yesterday, when it was only 10° above
the same point. Mr. M’Kenzie left us, and Chaboneau re-
turned with information that our horses loaded with meat
were below, but could not cross the ice not being shod.

Monday 11. We sent down a party with sleds, to relieve
the horses from their loads; the weather fair and cold, with
a N. W. wind. About five o’clock one of the wives of Cha-oneau was delivered of a boy; this being her first child she
was suffering considerable, when Mr. Jessaume told captain
Lewis that he had frequently administered to persons in her
situation, a small dose of the rattle of the rattlesnake which
had never failed to hasten the delivery. Having some of
the rattle, captain Lewis gave it to Mr. Jessaume who crum-
bled two of the rings of it between his fingers, and mixing
it with a small quantity of water gave it to her. What ef-
fect it may really have had it might be difficult to deter-
mine, but captain Lewis was informed that she had not ta-
ken it more than ten minutes before the delivery took place.

Tuesday 12. The morning is fair though cold, the mer-
curry being 14° below 0, the wind from the S. E. About
four o’clock the horses were brought in much fatigued; on
giving them meal bran moistened with water they would
not eat it, but preferred the bark of the cottonwood, which
as is already observed forms their principal food during the
winter. The horses of the Mandans are so often stolen by
the Sioux, Ricaras, and Assiniboins, that the invariable rule
now is to put the horses every night in the same lodge with
the family. In the summer they ramble in the plains in the
vicinity of the camp, and feed on the grass, but during cold
weather the squaws cut down the cottonwood trees as they
are wanted, and the horses feed on the boughs and bark of
the tender branches, which are also brought into the lodges
at night and placed near them. These animals are very se-
verely treated; for whole days they are pursuing the buffal-
loe, or burdened with the fruits of the chace, during which
they scarcely ever taste food, and at night return to a scanty allowance of wood; yet the spirit of this valuable animal sustains him through all these difficulties, and he is rarely deficient either in flesh or vigour.

Wednesday 13. The morning was cloudy, the thermometer at 2° below 0, the wind from the southeast. Captain Clarke returned last evening with all his hunting party: during their excursion they had killed forty deer, three buffaloe, and sixteen elk; but most of the game was too lean for use, and the wolves, who regard whatever lies out at night as their own, had appropriated a large part of it: when he left the fort on the 4th instant, he descended on the ice twenty-two miles to New Mandan island, near some of their old villages, and encamped, having killed nothing, and therefore without food for the night.

Early on the 5th, the hunters went out and killed two buffaloe and a deer, but the last only could be used, the others being too lean. After breakfast they proceeded down to an Indian lodge and hunted during the day: the next morning, 6th, they encamped forty-four miles from the fort on a sand point near the mouth of a creek on the southwest side, which they call Hunting creek, and during this and the following day hunted through all the adjoining plains, with much success, having killed a number of deer and elk. On the 8th, the best of the meat was sent with the horses to the fort, and such parts of the remainder as were fit for use were brought to a point of the river three miles below, and after the bones were taken out, secured in pens built of logs, so as to keep off the wolves, ravens and magpies, who are very numerous and constantly disappoint the hunter of his prey; they then went to the low grounds near the Chishtaw river, where they encamped, but saw nothing except some wolves on the hills, and a number of buffaloe too poor to be worth hunting. The next morning 9th, as there was no game and it would have been inconvenient to send it back sixty-miles to the fort, they returned up the river, and
for three days hunted along the banks and plains, and reached the fort in the evening of the twelfth much fatigued, having walked thirty miles that day on the ice and through the snow in many places knee deep, the moccasins too being nearly worn out: the only game which they saw besides what is mentioned, was some growse on the sandbars in the river.

Thursday 14. Last night the snow fell three inches deep; the day was, however, fine. Four men were despatched with sleds and three horses to bring up the meat which had been collected by the hunters. They returned however, with intelligence that about twenty-one miles below the fort a party of upwards of one hundred men, whom they supposed to be Sioux, rushed on them, cut the traces of the sleds, and carried off two of the horses, the third being given up by intercession of an Indian who seemed to possess some authority over them; they also took away two of the men's knifes, and a tomahawk, which last however they returned. We sent up to the Mandans to inform them of it, and to know whether any of them would join a party which intended to pursue the robbers in the morning. About twelve o'clock two of their chiefs came down and said that all their young men were out hunting, and that there were few guns in the village. Several Indians however, armed some with bows and arrows, some with spears and battle-axes, and two with fusils, accompanied captain Lewis, who set out,

Friday 15, at sunrise with twenty-four men. The morning was fine and cool, the thermometer being at 16º below 0. In the course of the day one of the Mandan chiefs returned from captain Lewis's party, his eye-sight having become so bad that he could not proceed. At this season of the year the reflexion from the ice and snow is so intense as to occasion almost total blindness. This complaint is very common, and the general remedy is to sweat the part affected by holding the face over a hot stone, and receiving the fumes from snow thrown on it. A large red fox was killed to-day.
Saturday 16. The morning was warm, mercury at 32º above 0, the weather cloudy: several of the Indians who went with captain Lewis returned, as did also one of our men, whose feet had been frostbitten.

Sunday 17. The weather continued as yesterday, though in the afternoon it became fair. Shotawhorora and his son came to see us, with about thirty pounds of dried buffaloe meat and some tallow.

Monday 18. The morning was cloudy with some snow, but in the latter part of the day it cleared up. Mr. M'Kenzie who had spent yesterday at the fort now left us. Our stock of meat is exhausted, so that we must confine ourselves to vegetable diet, at least till the return of the party: for this, however, we are at no loss, since both on this and the following day,

Tuesday 19, our blacksmith got large quantities of corn from the Indians who came in great numbers to see us. The weather was fair and warm, the wind from the south.

Wednesday, 20th. The day was delightfully fine; the mercury being at sunrise 2º and in the course of the day 22º above 0, the wind southerly. Kagohami came down to see us early: his village is afflicted by the death of one of their eldest men, who from his account to us must have seen one hundred and twenty winters. Just as he was dying, he requested his grandchildren to dress him in his best robe when he was dead, and then carry him on a hill and seat him on a stone, with his face down the river towards their old villages, that he might go straight to his brother who had passed before him to the ancient village under ground. We have seen a number of Mandans who have lived to a great age; chiefly however the men, whose robust exercises fortify the body, while the laborious occupations of the women shorten their existence.

Thursday 21. We had a continuation of the same pleasant weather. Oheenaw and Shahaka came down to see us, and mentioned that several of their countrymen had
gone to consult their medicine stone as to the prospects of the following year. This medicine stone is the great oracle of the Mandans, and whatever it announces is believed with implicit confidence. Every spring, and on some occasions during the summer, a deputation visits the sacred spot, where there is a thick porous stone twenty feet in circumference, with a smooth surface. Having reached the place the ceremony of smoking to it is performed by the deputies, who alternately take a whiff themselves and then present the pipe to the stone; after this they retire to and adjoining wood for the night, during which it may be safely presumed that all the embassy do not sleep; and in the morning they read the destinies of the nation in the white marks on the stone, which those who made them are at no loss to decypher. The Minnetarees have a stone of a similar kind, which has the same qualities and the same influence over the nation. Captain Lewis returned from his excursion in pursuit of the Indians. On reaching the place where the Sioux had stolen our horses, they found only one sled, and several pair of moccasins which were recognised to be those of the Sioux. The party then followed the Indian tracks till they reached two old lodges where they slept, and the next morning pursued the course of the river till they reached some Indian camps, where captain Clarke passed the night some time ago, and which the Sioux had now set on fire, leaving a little corn near the place in order to induce a belief that they were Ricaras. From this point the Sioux tracks left the river abruptly and crossed into the plains; but perceiving that there was no chance of overtaking them, captain Lewis went down to the pen where captain Clarke had left some meat, which he found untouched by the Indians, and then hunted in the low grounds on the river, till he returned with about three thousand pounds of meat, some drawn in a sled by fifteen of the men, and the rest on horseback; having killed thirty-six deer, fourteen elk, and one wolf.
Friday, 22d. The morning was cloudy and a little snow fell, but in the afternoon the weather became fair. We were visited by a number of Indians, among whom was Shotawhorora, a chief of much consideration among the Mandans, although by birth a Ricara.

Saturday, 23d. The day is warm and pleasant. Having worked industriously yesterday and all this morning we were enabled to disengage one of the periogues and haul it on shore, and also nearly to cut out the second. The father of the boy whose foot had been so badly frozen, and whom we had now cured, came to-day and carried him home in a sleigh.

Sunday, 24th. The weather is again fine. We succeeded in loosening the second periogue and barge, though we found a leak in the latter. The whole of the next day, Monday, 25th, we were occupied in drawing up the boats on the bank: the smallest one we carried there with no difficulty, but the barge was too heavy for our elk-skin ropes which constantly broke. We were visited by Orupsehara, or Black Moccasin, and several other chiefs, who brought us presents of meat on the backs of their squaws, and one of the Minnetarees requested and obtained permission for himself and his two wives to remain all night in the fort. The day was exceedingly pleasant.

Tuesday 26. The weather is again fine. By great labour during the day we got all the boats on the bank by sunset, an operation which attracted a great number of Indians to the fort.

Wednesday 27. The weather continues fine. All of us employed in preparing tools to build boats for our voyage, as we find that small periogues will be much more convenient than the barge in ascending the Missouri.

Thursday 28. The day is clear and pleasant. Sixteen men were sent out to examine the country for trees suitable for boats, and were successful in finding them. Two of the N. W. company traders arrived with letters; they had like-
wise a root which is used for the cure of persons bitten by mad dogs, snakes, and other venomous animals: it is found on high grounds and the sides of hills, and the mode of using it is to scarify the wound, and apply to it an inch or more of the chewed or pounded root, which is to be renewed twice a day; the patient must not however chew or swallow any of the root, as an inward application might be rather injurious than beneficial.

Mr. Gravelines with two Frenchmen and two Indians arrived from the Ricara nation, with letters from Mr. Anthony Tabeau. This last gentleman informs us that the Ricaras express their determination to follow our advice, and to remain at peace with the Mandans and Minnetarees, whom they are desirous of visiting; they also wish to know whether these nations would permit the Ricaras to settle near them, and form a league against their common enemies the Sioux. On mentioning this to the Mandans they agreed to it, observing that they always desired to cultivate friendship with the Ricaras, and that the Ahnahaways and Minnetarees have the same friendly views.

Mr. Gravelines states that the band of Tetons whom we had seen was well disposed to us, owing to the influence of their chief the Black Buffaloe; but that the three upper bands of Tetons, with the Sisatoons, and the Yanktons of the north, mean soon to attack the Indians in this quarter, with a resolution to put to death every white man they encounter. Moreover, that Mr. Cameron of St.Peter’s has armed the Sioux against the Chippeways, who have lately put to death three of his men. The men who had stolen our horses we found to be all Sioux, who after committing the outrage went to the Ricara villages, where they said that they had hesitated about killing our men who were with the horses, but that in future they would put to death any of us they could, as we were bad medicines and deserved to be killed. The Ricaras were displeased at their conduct and
refused to give them any thing to eat, which is deemed the greatest act of hostility short of actual violence.

Friday, March 1. The day is fine, and the whole party is engaged, some in making ropes and periogues, others in burning coal, and making battle axes to sell for corn.

Saturday 2. Mr. Laroche one of the N. W. company's traders has just arrived with merchandize from the British establishments on the Assiniboïn. The day is fine, and the river begins to break up in some places, the mercury being between 28° and 36° above 0, and the wind from the N.E. We were visited by several Indians.

Sunday 3. The weather pleasant, the wind from the E. with clouds; in the afternoon the clouds disappeared and the wind came from the N.W. The men are all employed in preparing the boats; we are visited by Poscapsahe and several other Indians with corn. A flock of ducks passed up the river to-day.

Monday 4. A cloudy morning with N.W. wind, the latter part of the day clear. We had again some Indian visitors with a small present of meat. The Assiniboins, who a few days since visited the Mandans, returned, and attempted to take horses from the Minnetarees, who fired on them; a circumstance which may occasion some disturbance between the two nations.

Tuesday 5. About four o'clock in the morning there was a slight fall of snow, but the day became clear and pleasant with the mercury 40° above 0. We sent down an Indian and a Frenchman to the Ricara villages with a letter to Mr. Tabeau.

Wednesday 6. The day was cloudy and smoky in consequence of the burning of the plains by the Minnetarees; they have set all the neighbouring country on fire in order to obtain an early crop of grass which may answer for the consumption of their horses, and also as an inducement for the buffaloe and other game to visit it. The horses stolen two days ago by the Assiniboins have been returned to the
Minnetarees. Ohhaw second chief of the lower Minnetaree village came to see us. The river rose a little and overran the ice, so as to render the crossing difficult.

Thursday, 7th. The day was somewhat cloudy, and colder than usual; the wind from the northeast. Shotawhorora visited us with a sick child, to whom some medicine was administered. There were also other Indians who brought corn and dried buffaloe meat in exchange for blacksmith's work.

Friday 8. The day cold and fair with a high easterly wind: we were visited by two Indians who gave us an account of the country and people near the Rocky mountains where they had been.

Saturday 9. The morning cloudy and cool, the wind from the north. The grand chief of the Minnetarees, who is called by the French Le Borgne, from his having but one eye, came down for the first time to the fort. He was received with much attention, two guns were fired in honour of his arrival, the curiosities were exhibited to him, and as he said that he had not received the presents which we had sent to him on his arrival, we again gave him a flag, a medal, shirt, armbraces and the usual presents on such occasions, with all which he was much pleased. In the course of the conversation, the chief observed that some foolish young men of his nation had told him there was a person among us who was quite black, and he wished to know if it could be true. We assured him that it was true, and sent for York: the Borgne was very much surprised at his appearance, examined him closely, and spit on his finger and rubbed the skin in order to wash off the paint; nor was it until the negro uncovered his head, and showed his short hair, that the Borgne could be persuaded that he was not a painted white man.

Sunday 10. A cold windy day. Tetuckopinreha, chief of the Ahnahaways, and the Minnetaree chief Ompschara, passed the day with us, and the former remained during the night. We had occasion to see an instance of the summary
justice of the Indians: a young Minnetaree had carried off the daughter of Cagonomokshe, the Raven Man, second chief of the upper village of the Mandans; the father went to the village and found his daughter, whom he brought home, and took with him a horse belonging to the offender: this reprisal satisfied the vengeance of the father and of the nation, as the young man would not dare to reclaim his horse, which from that time became the property of the injured party. The stealing of young women is one of the most common offences against the police of the village, and the punishment of it always measured by the power or the passions of the kindred of the female. A voluntary elopement is of course more rigorously chastised. One of the wives of the Borgne deserted him in favour of a man who had been her lover before the marriage, and who after some time left her, and she was obliged to return to her father's house. As soon as he heard it the Borgne walked there and found her sitting near the fire: without noticing his wife, he began to smoke with the father; when they were joined by the old men of the village, who knowing his temper had followed in hopes of appeasing him. He continued to smoke quietly with them, till rising to return, he took his wife by the hair, led her as far as the door, and with a single stroke of his tomahawk put her to death before her father's eyes: then turning fiercely upon the spectators, he said that if any of her relations wished to avenge her, they might always find him at his lodge; but the fate of the woman had not sufficient interest to excite the vengeance of the family. The caprice or the generosity of the same chief gave a very different result to a similar incident which occurred some time afterwards. Another of his wives eloped with a young man, who not being able to support her as she wished they both returned to the village, and she presented herself before the husband, supplicating his pardon for her conduct: the Borgne sent for the lover: at the moment when the youth expected that he would be put to death, the chief
mildly asked them if they still preserved their affection for each other; and on their declaring that want, and not a change of affection had induced them to return, he gave up his wife to her lover, with the liberal present of three horses, and restored them both to his favour.

Monday 11. The weather was cloudy in the morning and a little snow fell, the wind then shifted from southeast to northwest and the day became fair. It snowed again in the evening, but the next day,

Tuesday 12, was fair with the wind from the northwest.

Wednesday 13. We had a fine day, and a southwest wind. Mr. M'Kenzie came to see us, as did also many Indians who are so anxious for battle-axes that our smiths have not a moment's leisure, and procure us an abundance of corn. The river rose a little to-day, and so continued.

Thursday 14. The wind being from the west, and the day fine, the whole party were employed in building boats and in shelling corn.

Friday 15. The day is clear, pleasant and warm. We take advantage of the fine weather to hang all our Indian presents and other articles out to dry before our departure.

Saturday 16. The weather is cloudy, the wind from the southeast. A Mr. Garrow, a Frenchman who has resided a long time among the Ricaras and Mandans, explained to us the mode in which they make their large beads, an art which they are said to have derived from some prisoners of the Snake Indian nation, and the knowledge of which is a secret even now confined to a few among the Mandans and Ricaras: the process is as follows: glass of different colours is first pounded fine and washed, till each kind, which is kept separate, ceases to stain the water thrown over it: some well seasoned clay, mixed with a sufficient quantity of sand to prevent its becoming very hard when exposed to heat, and reduced by water to the consistency of dough, is then rolled on the palm of the hand, till it becomes of the thickness wanted for the hole in the bead: these sticks of
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clay are placed upright, each on a little pedestal or ball of the same material about an ounce in weight, and distributed over a small earthen platter, which is laid on the fire for a few minutes, when they are taken off to cool: with a little paddle or shovel three or four inches long and sharpened at the end of the handle, the wet pounded glass is placed in the palm of the hand: the beads are made of an oblong form wrapped in a cylindrical form round the stick of clay which is laid crosswise over it, and gently rolled backwards and forwards till it becomes perfectly smooth. If it be desired to introduce any other colour, the surface of the bead is perforated with the pointed end of the paddle and the cavity filled with pounded glass of that colour: the sticks with the string of beads are then replaced on their pedestals, and the platter deposited on burning coals or hot embers: over the platter an earthen pot containing about three gallons, with a mouth large enough to cover the platter, is reversed, being completely closed except a small aperture at the top, through which are watched the bead: a quantity of old dried wood formed into a sort of dough or paste is placed round the pot so as almost to cover it, and afterwards set on fire: the manufacturer then looks through the small hole in the pot, till he sees the beads assume a deep red colour, to which succeeds a paler or whitish red, or they become pointed at the upper extremity; on which the fire is removed and the pot suffered to cool gradually: at length it is removed, the clay in the hollow of them picked out with an awl or needle, and it is then fit for use. The beads thus formed are in great demand among the Indians, and used as pendants to their ears and hair, and are sometimes worn round the neck.

Sunday 17. A windy but clear and pleasant day, the river rising a little and open in several places. Our Minnetaree interpreter Chaboneau, whom we intended taking with us to the Pacific, had some days ago been worked
upon by the British traders, and appeared unwilling to accompany us, except on certain terms: such as his not being subject to our orders, and do duty, or to return whenever he chose. As we saw clearly the source of his hesitation, and knew that it was intended as an obstacle to our views, we told him that the terms were inadmissible, and that we could dispense with his services: he had accordingly left us with some displeasure. Since then he had made an advance towards joining us, which we showed no anxiety to meet; but this morning he sent an apology for his improper conduct, and agreed to go with us and perform the same duties as the rest of the corps; we therefore took him again into our service.

Monday 18. The weather was cold and cloudy, the wind from the north. We were engaged in packing up the goods into eight divisions, so as to preserve a portion of each in case of accident. We hear that the Sioux have lately attacked a party of Assiniboins and Knistenaux, near the Assiniboine river, and killed fifty of them.

Tuesday 19. Some snow fell last night, and this morning was cold, windy, and cloudy. Shahaka and Kagohami came down to see us, as did another Indian with a sick child, to whom we gave some medicine. There appears to be an approaching war, as two parties have already gone from the Minnetarees, and a third is preparing.

Wednesday 20. The morning was cold and cloudy, the wind high from the north, but the afternoon was pleasant. The canoes being finished, four of them were carried down to the river, at the distance of a mile and a half from where they were constructed.

Thursday 21. The remaining periogues were hauled to the same place, and all the men except three, who were left to watch them returned to the fort. On his way down, which was about six miles, captain Clarke passed along the points of the high hills, where he saw large quantities of pu-
micestone on the foot, sides and tops of the hills, which had every appearance of having been at some period on fire. He collected specimens of the stone itself, the pumicestone, and the hard earth; and on being put into the furnace the hard earth melted and glazed, the pumicestone melted, and the hardstone became a pumicestone glazed.
CHAPTER VII.

Indian method of attacking the buffaloe on the ice—An enumeration of the presents sent to the president of the United States—The party are visited by a Ricara chief—They leave their encampment, and proceed on their journey—description of the Little Missouri—Some account of the Assiniboins—Their mode of burying the dead—Whiteearth river described—Great quantity of salt discovered on its banks—Yellowstone river described—A particular account of the country at the confluence of the Yellowstone and Missouri—Description of the Missouri, the surrounding country, and of the rivers, creeks, islands, &c.

Friday 22. This was a clear pleasant day, with the wind from the S.S. W. We were visited by the second chief of the Minnetarees, to whom we gave a medal and some presents, accompanied by a speech. Mr. M'Kenzie and Mr. Laroche also came to see us. They all took their leave next day.

Saturday 23. Soon after their departure, a brother of the Borgne with other Indians came to the fort. The weather was fine, but in the evening we had the first rain that has fallen during the winter.

Sunday 24. The morning cloudy, but the afternoon fair, the wind from the N. E. We are employed in preparing for our journey. This evening swans and wild-geese flew towards the N. E.

Monday 25. A fine day, the wind S. W. The river rose nine inches, and the ice began breaking away in several places, so as to endanger our canoes which we are hauling down to the fort.

Tuesday 26. The river rose only half an inch, and being choked up with ice near the fort, did not begin to run till towards evening. This day is clear and pleasant.

Wednesday 27. The wind is still high from the S. W.: the ice which is occasionally stopped for a few hours is then
thrown over shallow sandbars when the river runs. We had all our canoes brought down, and were obliged to caulk and pitch very attentively the cracks so common in cottonwood.

Thursday 28. The day is fair. Some obstacle above has prevented the ice from running. Our canoes are now nearly ready, and we expect to set out as soon as the river is sufficiently clear to permit us to pass.

Friday 29. The weather clear, and the wind from N. W. The obstruction above gave way this morning, and the ice came down in great quantities; the river having fallen eleven inches in the course of the last twenty-four hours. We have had few Indians at the fort for the last three or four days, as they are now busy in catching the floating buffaloe. Every spring as the river is breaking up the surrounding plains are set on fire, and the buffaloe tempted to cross the river in search of the fresh grass which immediately succeeds to the burning: on their way they are often insulated on a large cake or mass of ice, which floats down the river: the Indians now select the most favourable points for attack, and as the buffaloe approaches dart with astonishing agility across the trembling ice, sometimes pressing lightly a cake of not more than two feet square: the animal is of course unsteady, and his footsteps insecure on this new element, so that he can make but little resistance, and the hunter, who has given him his death wound, paddles his icy boat to the shore and secures his prey.

Saturday 30. The day was clear and pleasant, the wind N. W. and the ice running in great quantities. All our Indian presents were again exposed to the air, and the barge made ready to descend the Missouri.

Monday 31. Early this morning it rained, and the weather continued cloudy during the day; the river rose nine inches, the ice not running so much as yesterday. Several flocks of geese and ducks fly up the river.

Monday, April 1, 1805. This morning there was a thunder storm, accompanied with large hail, to which succeeded
rain for about half an hour. We availed ourselves of this inter-

val to get all the boats in the water. At four o'clock P. M. it began to rain a second time, and continued till twelve

at night. With the exception of a few drops at two or three different times, this is the first rain we have had since the 15th of October last.

Tuesday 2. The wind was high last night and this morn-
ing from N. W. and the weather continued cloudy. The Mandans killed yesterday twenty-one elk, about fifteen miles below, but they were so poor as to be scarcely fit for use.

Wednesday 3. The weather is pleasant, though there was a white frost and some ice on the edge of the water. We were all engaged in packing up our baggage and mer-

chandize.

Thursday 4. The day is clear and pleasant, though the wind is high from N. W. We now packed up in different boxes a variety of articles for the president, which we shall send in the barge. They consisted of a stuffed male and female antelope with their skeletons, a weasel, three squirrels from the Rocky mountains, the skeleton of the prairie wolf, those of the white and gray hare, a male and female blaireau, or burrowing dog of the prairie, with a skeleton of the female, two burrowing squirrels, a white weasel, and the skin of the louservia, the horns of the mountain ram, or big-horn, a pair of large elk horns, the horns and tail of the black-tailed deer, and a variety of skins, such as those of the red fox, white hare, martin, yellow bear obtained from the Sioux; also, a number of articles of Indian dress, among which was a buffaloe robe, representing a battle fought about eight years since between the Sioux and Ricaras against the Mandans and Minnetarees, in which the combatants are represented on horseback. It has of late years excited much discussion to ascertain the period when the art of painting was first discovered: how hopeless all researches of this kind are, is evident from the foregoing fact. It is
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indebted for its origin to one of the strongest passions of the human heart; a wish to preserve the features of a departed friend, or the memory of some glorious exploit: this inherits equally the bosoms of all men either civilized or savage. Such sketches, rude and imperfect as they are, delineate the predominant character of the savage nations. If they are peaceable and inoffensive, the drawings usually consist of local scenery, and their favourite diversions. If the band are rude and ferocious, we observe tomahawks, scalpingknives, bows, arrows, and all the engines of destruction. A Mandan bow and quiver of arrows; also some Ricara tobacco-seed and an ear of Mandan corn; to these were added a box of plants, another of insects, and three cases containing a burrowing squirrel, a prairie hen, and four magpies, all alive.

Friday, 5th. Fair and pleasant, but the wind high from the northwest: we were visited by a number of Mandans, and are occupied in loading our boats in order to proceed on our journey.

Saturday, 6th. Another fine day with a gentle breeze from the south. The Mandans continue to come to the fort; and in the course of the day informed us of the arrival of a party of Ricaras on the other side of the river. We sent our interpreter to inquire into their reason for coming; and in the morning,

Sunday, 7th, he returned with a Ricara chief and three of his nation. The chief, whose name is Kagohweto, or Brave Raven, brought a letter from Mr. Tabeau, mentioning the wish of the grand chiefs of the Ricaras to visit the president, and requesting permission for himself and four men to join our boat when it descends; to which we consented, as it will then be manned with fifteen hands and be able to defend itself against the Sioux. After presenting the letter, he told us that he was sent with ten warriors by his nation to arrange their settling near the Mandans and Minnetarees, whom they wished to join; that he considered all the neighbouring nations friendly except the Sioux,
whose persecution they would no longer withstand, and whom they hoped to repel by uniting with the tribes in this quarter: he added that the Ricaras intended to follow our advice and live in peace with all nations, and requested that we would speak in their favour to the Assiniboin Indians. This we willingly promised to do, and assured them that their great father would protect them and no longer suffer the Sioux to have good guns, or to injure his dutiful children. We then gave him a small medal, a certificate of his good conduct, a carrot of tobacco, and some wampum, with which he departed for the Mandan village well satisfied with his reception. Having made all our arrangements, we left the fort about five o’clock in the afternoon. The party now consisted of thirty-two persons. Besides ourselves were serjeants John Ordway, Nathaniel Pryor, and Patrick Gass: the privates were William Bratton, John Colter, John Collins, Peter Cruzatte, Robert Frazier, Reuben Fields, Joseph Fields, George Gibson, Silas Goodrich, Hugh Hall, Thomas P. Howard, Baptiste Lapage, Francis Labiche, Hugh M’Neal, John Potts, John Shields, George Shannon, John B. Thompson, William Werner, Alexander Willard, Richard Windsor, Joseph Whitehouse, Peter Wiser, and captain Clarke’s black servant York. The two interpreters, were George Drewyer and Toussaint Chaboneau. The wife of Chaboneau also accompanied us with her young child, and we hope may be useful as an interpreter among the Snake Indians. She was herself one of that tribe, but having been taken in war by the Minnetarees, by whom she was sold as a slave to Chaboneau, who brought her up and afterwards married her. One of the Mandans likewise embarked with us, in order to go to the Snake Indians and obtain a peace with them for his countrymen. All this party with the baggage was stowed in six small canoes and two large periogues. We left the fort with fair pleasant weather though the northwest wind was high, and after making about four miles [encamped] on the north side of the Missouri, nearly
opposite the first Mandan village. At the same time that we took our departure, our barge manned with seven soldiers, two Frenchmen, and Mr. Gravelines as pilot, sailed for the United States loaded with our presents and despatches.

Monday, 8th. The day was clear and cool, the wind from the northwest, so that we travelled slowly. After breakfasting at the second Mandan village we passed the Mahaha at the mouth of Knife river, a handsome stream about eighty yards wide. Beyond this we reached the island which captain Clarke had visited on the 30th October. This island has timber as well as the lowlands on the north, but its distance from the water had prevented our encamping there during the winter. From the head of this island we made three and a half miles to a point of wood on the north, passing a high bluff on the south, and having come about fourteen miles. In the course of the day one of our boats filled and was near sinking; we however saved her with the loss of a little biscuit and powder.

Tuesday, April 9. We set off as soon as it was light, and proceeded five miles to breakfast, passing a low ground on the south, covered with groves of cottonwood timber. At the distance of six miles, we reached on the north a hunting camp of Minnetarees consisting of thirty lodges, and built in the usual form of earth and timber. Two miles and a quarter farther, comes in on the same side Miry creek, a small stream about ten yards wide, which, rising in some lakes near the Mouse river, passes through beautiful level fertile plains without timber in a direction nearly southwest; the banks near its entrance being steep, and rugged on both sides of the Missouri. Three miles above this creek we came to a hunting party of Minnetarees, who had prepared a park or inclosure and were waiting the return of the antelope: this animal, which in the autumn retires for food and shelter to the Black mountains during the winter, recross the river at this season of the year, and spread themselves through the plains on the north of the Missouri. We halt-
ed and smoked a short time with them, and then proceeded on through handsome plains on each side of the river, and encamped at the distance of twenty-three and a half miles on the north side: the day was clear and pleasant, the wind high from the south, but afterwards changed to a western steady breeze. The bluffs which we passed to-day are upwards of one hundred feet high, composed of a mixture of yellow clay and sand, with many horizontal strata of carbonated wood resembling pit-coal, from one to five feet in depth, and scattered through the bluff at different elevations, some as high as eighty feet above the water: the hills along the river are broken, and present every appearance of having been burned at some former period; great quantities of pumicestone and lava or rather earth, which seems to have been boiled and then hardened by exposure, being seen in many parts of these hills where they are broken and washed down into gullies by the rain and melting snow. A great number of brants pass up the river: there are some of them perfectly white, except the large feathers of the first and second joint of the wing which are black, though in every other characteristic they resemble common gray brant: we also saw but could not procure an animal that burrows in the ground, and similar in every respect to the burrowing squirrel, except that it is only one third of its size. This may be the animal whose works we have often seen in the plains and prairies; they resemble the labours of the salamander in the sand hills of South Carolina and Georgia, and like him, the animals rarely come above ground; they consist of a little hillock of ten or twelve pounds of loose ground which would seem to have been reversed from a pot, though no aperture is seen through which it could have been thrown: on removing gently the earth, you discover that the soil has been broken in a circle of about an inch and a half diameter, where the ground is looser though still no opening is perceptible. When we stopped for dinner the squaw went out, and after penetrating with
a sharp stick the holes of the mice, near some drift wood, brought to us a quantity of wild artichokes, which the mice collect and hoard in large numbers; the root is white, of an ovate form, from one to three inches long, and generally of the size of a man's finger, and two, four, and sometimes six roots are attached to a single stalk. Its flavour as well as the stalk which issues from it resemble those of the Jerusalem artichoke, except that the latter is much larger. A large beaver was caught in a trap last night, and the mosquitoes begin to trouble us.

Wednesday 10. We again set off early with clear pleasant weather, and halted about ten for breakfast, above a sandbank which was falling in, and near a small willow island. On both sides of the Missouri, after ascending the hills near the water, one fertile unbroken plain extends itself as far as the eye can reach, without a solitary tree or shrub, except in moist situations or in the steep declivities of hills where they are sheltered from the ravages of fire. At the distance of twelve miles we reached the lower point of a bluff on the south; which is in some parts on fire and throws out quantities of smoke which has a strong sulphurous smell, the coal and other appearances in the bluffs being like those described yesterday: at one o'clock we overtook three Frenchmen who left the fort a few days before us, in order to make the first attempt on this river of hunting beaver, which they do by means of traps; their efforts promise to be successful for they have already caught twelve which are finer than any we have ever seen: they mean to accompany us as far as the Yellowstone river in order to obtain our protection against the Assiniboins who might attack them. In the evening we encamped on a willow point to the south opposite to a bluff, above which a small creek falls in, and just above a remarkable bend in the river to the southwest, which we called the Little Basin. The low grounds which we passed to-day possess more timber than is usual, and are wider; the current is mode-
rate, at least not greater than that of the Ohio in high tides; the banks too fall in but little; so that the navigation comparatively with that lower down the Missouri is safe and easy. We were enabled to make eighteen and a half miles: we saw the track of a large white bear, there were also a herd of antelopes in the plains; the geese and swan are now feeding in considerable quantities on the young grass in the low prairies; we shot a prairie hen, and a bald eagle of which there were many nests in the tall cottonwood trees; but could procure neither of two elk which were in the plain. Our old companions the musquitoes have renewed their visit, and gave us much uneasiness.

Thursday, 11th. We set out at daylight, and after passing bare and barren hills on the south, and a plain covered with timber on the north, breakfasted at five miles distance: here we were regaled with a deer brought in by the hunters, which was very acceptable as we had been for several days without fresh meat; the country between this and fort Mandan being so frequently disturbed by hunters that the game has become scarce. We then proceeded with a gentle breeze from the south which carried the periogues on very well; the day was however so warm that several of the men worked with no clothes except round the waist, which is the less inconvenient as we are obliged to wade in some places owing to the shallowness of the river. At seven miles we reached a large sandbar making out from the north. We again stopped for dinner, after which we went on to a small plain on the north covered with cottonwood where we encamped, having made nineteen miles. The country around is much the same as that we passed yesterday: on the sides of the hills, and even on the banks of the rivers, as well as on the sandbars, is a white substance which appears in considerable quantities on the surface of the earth, and tastes like a mixture of common salt with glauber salts: many of the streams which come from the foot of the hills, are so strongly impregnated with this sub-
stance, that the water has an unpleasant taste and a purgative effect. A beaver was caught last night by one of the Frenchmen; we killed two geese, and saw some cranes, the largest bird of that kind common to the Missouri and Mississippi, and perfectly white except the large feathers on the two first joints of the wing which are black. Under a bluff opposite to our encampment we discovered some Indians with horses, whom we supposed were Minnetarees, but the width of the river prevented our speaking to them.

Friday, 12th. We set off early and passed a high range of hills on the south side, our periogues being obliged to go over to the south, in order to avoid a sandbank which was rapidly falling in. At six miles we came to at the lower side of the entrance of the Little Missouri, where we remained during the day for the purpose of making celestial observations. This river empties itself on the south side of the Missouri, one thousand six hundred and ninety-three miles from its confluence with the Mississippi. It rises to the west of the Black mountains, across the northern extremity of which it finds a narrow rapid passage along high perpendicular banks, then seeks the Missouri in a north-eastern direction, through a broken country with highlands bare of timber, and the low grounds particularly supplied with cottonwood, elm, small ash, box, alder, and an undergrowth of willow, redwood, sometimes called red or swamp-willow, the redberry and chokecherry. In its course it passes near the northwest side of the Turtle mountain, which is said to be only twelve or fifteen miles from its mouth in a straight line a little to the south of west, so that both the Little Missouri and Knife river have been laid down too far southwest. It enters the Missouri with a bold current, and is one hundred and thirty-four yards wide, but its greatest depth is two feet and a half, and this joined to its rapidity and its sandbars, make the navigation difficult except for canoes, which may ascend it for a considerable distance. At the mouth, and as far as we could
discern from the hills between the two rivers about three
miles from their junction, the country is much broken, the
soil consisting of a deep rich dark coloured loam, inter-
mixed with a small proportion of fine sand and covered
generally with a short grass resembling blue grass. In its
colour, the nature of its bed, and its general appearance, it
resembles so much the Missouri as to induce a belief that
the countries they water are similar in point of soil. From
the Mandan villages to this place the country is hilly and
irregular, with the same appearance of glauber salts and
carbonated wood, the low grounds smooth, sandy, and par-
tially covered with cottonwood and small ash; at some dis-
tance back there are extensive plains of a good soil, but
without timber or water.

We found great quantities of small onions which grow
single, the bulb of an oval form, white, about the size of a
bullet with a leaf resembling that of the shive. On the side
of a neighbouring hill, there is a species of dwarf cedar: it
spreads its limbs along the surface of the earth, which it
almost conceals by its closeness and thickness, and is som-
times covered by it, having always a number of roots on the
under side, while on the upper are a quantity of shoots which
with their leaves seldom rise higher than six or eight inch-
es; it is an evergreen, its leaf more delicate than that of
the common cedar, though the taste and smell is the same.

The country around has been so recently hunted that
the game are extremely shy, so that a white rabbit, two bea-
ver, a deer, and a bald eagle were all that we could procure.
The weather had been clear, warm, and pleasant in the
morning, but about three we had a squall of high wind and
rain with some thunder, which lasted till after sunset when
it again cleared off.

Saturday 13. We set out at sunrise, and at nine o'clock
having the wind in our favour went on rapidly past a timbered
low ground on the south, and a creek on the north at the
distance of nine miles, which we called Onion creek, from
the quantity of that plant which grows in the plains near it: this creek is about sixteen yards wide at a mile and a half above its mouth, it discharges more water than is usual for creeks of that size in this country, but the whole plain which it waters is totally destitute of timber. The Missouri itself widens very remarkably just above the junction with the Little Missouri: immediately at the entrance of the latter, it is not more than two hundred yards wide, and so shallow that it may be passed in canoes with setting poles, while a few miles above it is upwards of a mile in width: ten miles beyond Onion creek we came to another, discharging itself on the north in the centre of a deep bend: on ascending it for about a mile and a half, we found it to be the discharge of a pond or small lake, which seemed to have been once the bed of the Missouri: near this lake were the remains of forty-three temporary lodges which seem to belong to the Assiniboins, who are now on the river of the same name. A great number of swan and geese were also in it, and from this circumstance we named the creek Goose creek, and the lake by the same name: these geese we observe do not build their nests on the ground or in sandbars, but in the tops of lofty cottonwood trees: we saw some elk and buffalo to-day but at too great a distance to obtain any of them, though a number of the carcasses of the latter animal are strewn along the shore, having fallen through the ice, and been swept along when the river broke up. More bald eagles are seen on this part of the Missouri than we have previously met with; the small or common hawk, common in most parts of the United States, are also found here: great quantities of geese are feeding in the prairies, and one flock of white brant or geese with black wings, and some gray brant with them pass up the river, and from their flight they seem to proceed much farther to the northwest. We killed two antelopes which were very lean, and caught last night two beaver: the French hunters who had procured seven, thinking the neighbourhood of the Little Missouri
convenient hunting ground for that animal, remained behind there: in the evening we encamped in a beautiful plain on the north thirty feet above the river, having made twenty-two and a half miles.

Sunday 14. We set off early with pleasant and fair weather: a dog joined us, which we suppose had strayed from the Assiniboin camp on the lake. At two and a half miles we passed timbered low grounds and a small creek: in these low grounds are several uninhabited lodges built with the boughs of the elm, and the remains of two recent encampments, which from the hoops of small kegs found in them we judged could belong to Assiniboins only, as they are the only Missouri Indians who use spirituous liquors: of these they are so passionately fond that it forms their chief inducement to visit the British on the Assinboin, to whom they barter for kegs of rum their dried and pounded meat, their grease, and the skins of large and small wolves, and small foxes. The dangerous exchange is transported to their camps with their friends and relations, and soon exhausted in brutal intoxication: so far from considering drunkenness as disgraceful, the women and children are permitted and invited to share in these excesses with their husbands and fathers, who boast how often their skill and industry as hunters has supplied them with the means of intoxication: in this, as in their other habits and customs, they resemble the Sioux from whom they are descended: the trade with the Assiniboins and Knistenaux is encouraged by the British, because it engages on their return from Rainy lake to the English river and the Athabasky country where they winter; these men being obliged during that voyage to pass rapidly through a country but scantily supplied with game. We halted for dinner near a large village of burrowing squirrels, who we observe generally select a southeasterly exposure, though they are sometimes found in the plains. At ten and a quarter miles we came to the lower point of an
island, which from the day of our arrival there we called Sunday island: here the river washes the bases of the hills on both sides and above the island, which with its sandbar extends a mile and a half; two small creeks fall in from the south; the uppermost of these, which is the largest, we called Chaboneau's creek, after our interpreter who once encamped on it several weeks with a party of Indians. Beyond this no white man had ever been except two Frenchmen, one of whom Lapage is with us, and who having lost their way straggled a few miles further, though to what point we could not ascertain: about a mile and a half beyond this island we encamped on a point of woodland on the north, having made in all fourteen miles.

The Assiniboins have so recently left the river that game is scarce and shy. One of the hunters shot at an otter last evening; a buffaloe too was killed, and an elk, both so poor as to be almost unfit for use; two white bear were also seen, and a muskrat swimming across the river. The river continues wide and of about the same rapidity as the ordinary current of the Ohio. The low grounds are wide, the moister parts containing timber, the upland extremely broken, without wood, and in some places seem as if they had slipped down in masses of several acres in surface. The mineral appearances of salts, coal, and sulphur, with the burnt hill and pumicestone continue, and a bituminous water about the colour of strong lye, with the taste of glauber salts and a slight tincture of allum. Many geese were feeding in the prairies, and a number of magpies who build their nests much like those of the blackbird in trees, and composed of small sticks, leaves and grass, open at top: the egg is of a bluish brown colour, freckled with reddish brown spots. We also killed a large hooting owl resembling that of the United States, except that it was more booted and clad with feathers. On the hills are many aromatic herbs, resembling in taste, smell and appearance the sage, hysop, wormwood, southern wood, juniper and dwarf cedar; a plant also about two or
three feet high, similar to the camphor in smell and taste, and another plant of the same size, with a long, narrow, smooth, soft leaf, of an agreeable smell and flavour, which is a favourite food of the antelope, whose necks are often perfumed by rubbing against it.

Monday 15. We proceeded under a fine breeze from the south, and clear pleasant weather. At seven miles we reached the lower point of an island in a bend to the south, which is two miles in length. Captain Clarke, who went about nine miles northward from the river reached the high grounds, which, like those we have seen, are level plains without timber; here he observed a number of drains, which descending from the hills pursue a northeast course, and probably empty into the Mouse river, a branch of the Assiniboin, which from Indian accounts approaches very near to the Missouri at this place. Like all the rivulets of this neighbourhood these drains were so strongly impregnated with mineral salts that they are not fit to drink. He saw also the remains of several camps of Assiniboins: the low grounds on both sides of the river are extensive, rich, and level. In a little pond on the north, we heard for the first time this season the croaking of frogs, which exactly resembles that of the small frogs in the United States: there are also in these plains great quantities of geese, and many of the grouse, or prairie hen, as they are called by the N. W. company traders; the note of the male, as far as words can represent it, is cook, cook, cook, coo, coo, coo, the first part of which both male and female use when flying; the male too drums with his wings when he flies in the same way, though not so loud as the pheasant; they appear to be mating. Some deer, elk, and goats were in the low grounds, and buffaloe on the sand beaches, but they were uncommonly shy; we also saw a black bear, and two white ones. At fifteen miles we passed on the north side a small creek twenty yards wide, which we called Goatpen creek, from a park or enclosure for the purpose of catching that animal, which those who went up the creek found,
Up the Missouri.

and which we presume to have been left by the Assiniboins. Its water is impregnated with mineral salts, and the country through which it flows consists of wide and very fertile plains, but without any trees. We camped at the distance of twenty-three miles, on a sandpoint to the south; we passed in the evening a rock in the middle of the river, the channel of which a little above our camp, is confined within eighty yards.

Tuesday 16. The morning was clear, the wind light from the S. E. The country presents the same appearance of low plains and meadows on the river, bounded a few miles back by broken hills, which end in high level fertile lands, the quantity of timber is however increasing. The appearances of minerals continues as usual, and to-day we found several stones which seemed to have been wood, first carbonated and then petrified by the water of the Missouri, which has the same effect on many vegetable substances. There is indeed reason to believe that the strata of coal in the hills cause the fire and appearances which they exhibit of being burned. Whenever these marks present themselves in the bluffs on the river, the coal is seldom seen, and when found in the neighbourhood of the strata of burnt earth, the coal with the sand and sulphurous matter usually accompanying it, is precisely at the same height and nearly of the same thickness with those strata. We passed three small creeks or rather runs, which rise in the hills to the north. Numbers of geese, and a few ducks chiefly of the mallard and bluewinged teal, many buffaloe, elk and deer were also observed, and in the timbered low grounds this morning we were surprised to observe a great quantity of old hornets’ nests: we camped in a point of woods on the south, having come eighteen miles, though the circuits which we were obliged to make round sandbars very much increased the real distance.

Wednesday, April 17. We set off early, the weather being fine, and the wind so favourable as to enable us to sail the
greater part of the course. At ten and three quarter miles we passed a creek ten yards wide on the south; at eighteen miles a little run on the north, and at night encamped in a woody point on the south. We had travelled twenty-six miles through a country similar to that of yesterday, except that there were greater appearances of burnt hills, furnishing large quantities of lava and pumicestone, of the last of which we observe some pieces floating down the river, as we had previously done, as low as the Little Missouri. In all the copses of wood are the remains of the Assiniboine encampments; around us are great quantities of game, such as herds of buffaloe, elk, antelopes, some deer and wolves, the tracks of bears, a curlue was also seen, and we obtained three beaver, the flesh of which is more relished by the men than any other food which we have. Just before we encamped we saw some tracks of Indians, who had passed twenty-four hours before, and left four rafts, and whom we supposed to be a band of Assiniboins on their return from war against the Indians on the Rocky mountains.

Thursday 18. We had again a pleasant day, and proceeded on with a westerly wind, which however changed to N. W. and blew so hard that we were obliged to stop at one o'clock and remain four hours, when it abated and we then continued our course.

We encamped about dark on a woody bank having made thirteen miles. The country presented the usual variety of highlands interspersed with rich plains. In one of these we observed a species of pea bearing a yellow flower, which is now in blossom, the leaf and stalk resembling the common pea. It seldom rises higher than six inches, and the root is perennial. On the rose bushes we also saw a quantity of the hair of the buffaloe, which had become perfectly white by exposure, and resembled the wool of the sheep, except that it was much finer and more soft and silky. A buffaloe which we killed yesterday had shed his long hair, and that which remained was about two inches long, thick,
fine, and would have furnished five pounds of wool, of which we have no doubt an excellent cloth may be made. Our game to-day was a beaver, a deer, an elk, and some geese. The river has been crooked all day and bearing towards the south.

On the hills we observed considerable quantities of dwarf juniper, which seldom grows higher than three feet. We killed in the course of the day an elk, three geese and a beaver. The beaver on this part of the Missouri are in greater quantities, larger and fatter, and their fur is more abundant and of a darker colour than any we had hitherto seen: their favourite food seems to be the bark of the cottonwood and willow, as we have seen no other species of tree that has been touched by them, and these they gnaw to the ground through a diameter of twenty inches.

The next day, Friday, 19th, the wind was so high from northwest that we could not proceed, but being less violent on

Saturday, 20th, we set off about seven o'clock, and had nearly lost one of the canoes as we left the shore, by the falling in of a large part of the bank. The wind too became again so strong that we could scarcely make one mile an hour, and the sudden squalls so dangerous to the small boats, that we stopped for the night among some willows on the north, not being able to advance more than six and a half miles. In walking through the neighbouring plains we found a fine fertile soil covered with cottonwood, some box, alder, ash, red elm, and an undergrowth of willow, rosebushes, honeysuckle, red willow, gooseberry, currant, and serviceberries, and along the foot of the hills great quantities of hysop. Our hunters procured elk and deer which are now lean, and six beaver which are fatter and more palatable. Along the plain there were also some Indian camps; near one of these was a scaffold about seven feet high, on which were two sleds with their harness, and under it the body of a female, carefully wrapped in several
dressed buffaloe skins; near it lay a bag made of buffaloe skin, containing a pair of moccasins, some red and blue paint, beaver's nails, scrapers for dressing hides, some dried roots, several plaits of sweet grass, and a small quantity of Mandan tobacco. These things as well as the body itself had probably fallen down by accident, as the custom is to place them on the scaffold. At a little distance was the body of a dog not yet decayed, who had met this reward for having dragged thus far in the sled the corpse of his mistress, to whom according to the Indian usage he had been sacrificed.

Sunday, 21st. Last night there was a hard white frost, and this morning the weather cold, but clear and pleasant: in the course of the day however it became cloudy and the wind rose. The country is of the same description as within the few last days. We saw immense quantities of buffaloe, elk, deer, antelopes, geese, and some swan and ducks, out of which we procured three deer, four buffaloe calves, which last are equal in flavour to the most delicious veal; also two beaver, and an otter. We passed one large and two small creeks on the south side, and reached at sixteen miles the mouth of Whiteearth river, coming in from the north. This river before it reaches the low grounds near the Missouri, is a fine bold stream sixty yards wide, and is deep and navigable, but it is so much choked up at the entrance by the mud of the Missouri, that its mouth is not more than ten yards wide. Its course, as far as we could discern from the neighbouring hills, is nearly due north, passing through a beautiful and fertile valley, though without a tree or bush of any description. Half a mile beyond this river we encamped on the same side below a point of highland, which from its appearance we call Cut bluff.

Monday, 22d. The day clear and cold: we passed a high bluff on the north and plains on the south, in which were large herds of buffaloe, till breakfast, when the wind became so strong ahead that we proceeded with difficulty even with
the aid of the towline. Some of the party now walked across to the Whiteearth river, which here at the distance of four miles from its mouth approaches very near to the Missouri. It contains more water than is usual in streams of the same size at this season, with steep banks about ten or twelve feet high, and the water is much clearer than that of the Missouri; the salts which have been mentioned as common on the Missouri, are here so abundant that in many places the ground appears perfectly white, and from this circumstance it may have derived its name; it waters an open country and is navigable almost to its source, which is not far from the Saskaskawan, and judging from its size and course, it is probable that it extends as far north as the fiftieth degree of latitude. After much delay in consequence of the high wind, we succeeded in making eleven miles, and encamped in a lowground on the south covered with cottonwood and rabbitberries. The hills of the Missouri near this place exhibit large irregular broken masses of rocks and stones, some of which, although two hundred feet above the water, seem at some remote period to have been subject to its influence, being apparently worn smooth by the agitation of the water. These rocks and stones consist of white and gray granite, a brittle black rock, flint, limestone, freestone, some small specimens of an excellent pebble, and occasionally broken stratas of a black coloured stone like petrified wood, which make good whetstones. The usual appearances of coal, or carbonated wood, and punicestone still continue, the coal being of a better quality and when burnt affords a hot and lasting fire, emitting very little smoke or flame. There are large herds of deer, elk, buffaloe, and antelopes in view of us: the buffaloe are not so shy as the rest, for they suffer us to approach within one hundred yards before they run, and then stop and resume their pasture at a very short distance. The wolves to-day pursued a herd of them, and at length caught a calf that was unable to keep up with the rest; the mothers on these
occasions defending their young as long as they can retreat as fast as the herd, but seldom returning any distance to seek for them.

Tuesday 23. A clear and pleasant morning, but at nine o'clock the wind became so high that the boats were in danger of upsetting; we therefore were forced to stop at a place of safety till about five in the afternoon, when the wind being lower we proceeded and encamped on the north at the distance of thirteen and a half miles: the party on shore brought us a buffaloe calf and three blacktailed deer: the sand on the river has the same appearances as usual, except that the quantity of wood increases.

Wednesday 24. The wind blew so high during the whole day that we were unable to move; such indeed was its violence, that although we were sheltered by high timber the waves wet many articles in the boats: the hunters went out and returned with four deer, two elk, and some young wolves of the small kind. The party are very much afflicted with sore eyes, which we presume are occasioned by the vast quantities of sand which are driven from the sandbars in such clouds as often to hide from us the view of the opposite bank. The particles of this sand are so fine and light that it floats for miles in the air like a column of thick smoke, and is so penetrating that nothing can be kept free from it, and we are compelled to eat, drink, and breathe it very copiously. To the same cause we attribute the disorder of one of our watches, although her cases are double and tight; since without any defect in its works, that we can discover, it will not run for more than a few minutes without stopping.

Thursday 25. The wind moderated this morning, but was still high; we therefore set out early, the weather being so cold that the water froze on the oars as we rowed, and about ten o'clock the wind increased so much that we were obliged to stop. This detention from the wind and the reports from our hunters of the crookedness of the river, in-
duced us to believe that we were at no great distance from the Yellowstone river. In order therefore to prevent delay as much as possible, captain Lewis determined to go on by land in search of that river, and make the necessary observations, so as to be enabled to proceed on immediately after the boats should join him: he therefore landed about eleven o'clock on the south side, accompanied by four men; the boats were prevented from going until five in the afternoon, when they went on a few miles further and encamped for the night at the distance of fourteen and a half miles.

Friday 26. We continued our voyage in the morning and by twelve o'clock encamped at eight miles distance, at the junction of the Missouri and Yellowstone rivers; where we were soon joined by captain Lewis.

On leaving us yesterday he pursued his route along the foot of the hills, which he ascended at the distance of eight miles; from these the wide plains watered by the Missouri and the Yellowstone spread themselves before the eye, occasionally varied with the wood of the banks, enlivened by the irregular windings of the two rivers, and animated by vast herds of buffaloe, deer, elk, and antelope. The confluence of the two rivers was concealed by the wood, but the Yellowstone itself was only two miles distant to the south. He therefore descended the hills and encamped on the bank of the river, having killed as he crossed the plain four buffaloes; the deer alone are shy and retire to the woods, but the elk, antelope, and buffaloe suffered him to approach them without alarm, and often followed him quietly for some distance. This morning he sent a man up the river to examine it, while he proceeded down to the junction: the ground on the lower side of the Yellowstone near its mouth, is flat, and for about a mile seems to be subject to inundation, while that at the point of junction, as well as on the opposite side of the Missouri, is at the usual height of ten or eighteen feet above the water, and therefore not overflowed. There is more timber in the neighbourhood of this
place, and on the Missouri, as far below as the **Whiteearth river**, than on any other part of the Missouri on this side of the **Chayenne**: the timber consists principally of cottonwood, with some small elm, ash, and box alder. On the sandbars and along the margin of the river grows the small-leaved willow; in the low grounds adjoining are scattered rosebushes, three or four feet high, the redberry, serviceberry and redwood. The higher plains are either immediately on the river, in which case they are generally timbered, and have an undergrowth like that of the low grounds, with the addition of the broad-leaved willow, gooseberry, chokecherry, purple currant, and honeysuckle: or they are between the low grounds and the hills, and for the most part without wood or any thing except large quantities of wild hyssop; this plant risest about two feet high, and like the willow of the sandbars is a favourite food of the buffaloe, elk, deer, grouse, porcupine, hare, and rabbit. This river which had been known to the French as the Roche jaune, or as we have called it the **Yellowstone**, rises according to Indian information in the Rocky mountains; its sources are near those of the Missouri and the **Platte**, and it may be navigated in canoes almost to its head. It runs first through a mountainous country, but in many parts fertile and well timbered; it then waters a rich delightful land, broken into vallies and meadows, and well supplied with wood and water till it reaches near the Missouri open meadows and low grounds, sufficiently timbered on its borders. In the upper country its course is represented as very rapid, but during the two last and largest portions, its current is much more gentle than that of the Missouri, which it resembles also in being turbid though with less sediment. The man who was sent up the river, reported in the evening that he had gone about eight miles, that during that distance the river winds on both sides of a plain four or five miles wide, that the current was gentle and much obstructed by sandbars, that at five miles he had met with a large timbered island, three miles beyond which a
creek falls in on the S.E. above a high bluff, in which are several strata of coal. The country as far as he could discern, resembled that of the Missouri, and in the plain he met several of the bighorn animals, but they were too shy to be obtained. The bed of the Yellowstone, as we observed it near the mouth, is composed of sand and mud, without a stone of any kind. Just above the confluence we measured the two rivers, and found the bed of the Missouri five hundred and twenty yards wide, the water occupying only three hundred and thirty, and the channel deep: while the Yellowstone, including its sandbar, occupied eight hundred and fifty-eight yards, with two hundred and ninety-seven yards of water: the deepest part of the channel is twelve feet, but the river is now falling and seems to be nearly at its summer height.

April 27. We left the mouth of the Yellowstone. From the point of junction a wood occupies the space between the two rivers, which at the distance of a mile comes within two hundred and fifty yards of each other. There a beautiful low plain commences, and widening as the rivers recede, extends along each of them for several miles, rising about half a mile from the Missouri into a plain twelve feet higher than itself. The low plain is a few inches above high water mark, and where it joins the higher plain there is a channel of sixty or seventy yards in width, through which a part of the Missouri when at its greatest height passes into the Yellowstone. At two and a half miles above the junction and between the high and low plain is a small lake, two hundred yards wide, extending for a mile parallel with the Missouri along the edge of the upper plain. At the lower extremity of this lake, about four hundred yards from the Missouri, and twice that distance from the Yellowstone, is a situation highly eligible for a trading establishment; it is in the high plain which extends back three miles in width, and seven or eight miles in length, along the Yellowstone, where it is bordered by an extensive body of woodland, and
along the Missouri with less breadth, till three miles above
it is circumscribed by the hills within a space four yards in
width. A sufficient quantity of limestone for building may
easily be procured near the junction of the rivers; it does
not lie in regular stratas, but is in large irregular masses,
of a light colour and apparently of an excellent quality.
Game too is very abundant, and as yet quite gentle; above
all, its elevation recommends it as preferable to the land at
the confluence of the rivers, which their variable channels
may render very insecure. The N. W. wind rose so high
at eleven o’clock, that we were obliged to stop till about
four in the afternoon, when we proceeded till dusk. On the
south a beautiful plain separates the two rivers, till at about
six miles there is a timbered piece of low ground, and a lit-
tle above it bluffs, where the country rises gradually from
the river; the situations on the north more high and open.
We [encamped] on that side, the wind, the sand which it ra-
ised, and the rapidity of the current having prevented our
advancing more than eight miles; during the latter part of
the day the river becomes wider and crouded with sandbars:
although the game is in such plenty we kill only what is ne-
essary for our subsistence. For several days past we have
seen great numbers of buffaloe lying dead along the shore,
and some of them partly devoured by the wolves; they have
either sunk through the ice during the winter, or been drown-
ed in attempting to cross, or else, after crossing to some
high bluff, found themselves too much exhausted either to
ascend or swim back again, and perished for want of food;
in this situation we found several small parties of them.
There are geese too in abundance, and more bald-eagles than
we have hitherto observed; the nests of these last being al-
ways accompanied by those of two or three magpies, who
are their inseparable attendants.
CHAPTER VIII.

Unusual appearance of salt—The formidable character of the white bear—Porcupine river described—Beautiful appearance of the surrounding country—Immense quantities of game—Milk river described—Extraordinary character of Bigdry river—An instance of uncommon tenacity of life in a white bear—Narrow escape of one of the party from that animal—A still more remarkable instance—Muscleshell river described.

Sunday 28. The day was clear and pleasant, and the wind having shifted to southeast, we could employ our sails, and **went twenty-four miles** to a low ground on the north opposite to steep bluffs: the country on both sides is much broken, the hills approaching nearer to the river, and forming bluffs, some of a white and others of a red colour, and exhibiting the usual appearances of minerals, and some burnt hills though without any pumicestone; the salts are in greater quantities than usual, and the banks and sandbars are covered with a white incrustation like frost. The low grounds are level, fertile and partially timbered, but are not so wide as for a few days past. The woods are now green, but the plains and meadows seem to have less verdure than those below: the only streams which we met to-day are two small runs on the north and one on the south, which rise in the neighbouring hills, and have very little water. At the distance of eighteen miles the Missouri makes a considerable bend to the southeast: the game is very abundant, the common, and mule or black-tailed deer, elk, buffaloe, antelope, brown bear, beaver, and geese. The beaver have committed great devastation among the trees, one of which, nearly three feet in diameter, had been gnawed through by them.
Monday 29. We proceeded early with a moderate wind: captain Lewis who was on shore with one hunter met about eight o'clock two white bears: of the strength and ferocity of this animal, the Indians had given us dreadful accounts: they never attack him but in parties of six or eight persons, and even then are often defeated with the loss of one or more of the party. Having no weapons but bows and arrows, and the bad guns with which the traders supply them, they are obliged to approach very near to the bear; and as no wound except through the head or heart is mortal, they frequently fall a sacrifice if they miss their aim. He rather attacks than avoids a man, and such is the terror which he has inspired, that the Indians who go in quest of him paint themselves and perform all the superstitious rites customary when they make war on a neighbouring nation. Hitherto those we had seen did not appear desirous of encountering us, but although to a skilful rifleman the danger is very much diminished, yet the white bear is still a terrible animal: on approaching these two, both captain Lewis and the hunter fired and each wounded a bear: one of them made his escape; the other turned upon captain Lewis and pursued him seventy or eighty yards, but being badly wounded he could not run so fast as to prevent him from reloading his piece, which he again aimed at him, and a third shot from the hunter brought him to the ground: he was a male not quite full grown, and weighed about three hundred pounds: the legs are somewhat longer than those of the black bear, and the talons and tusks much larger and longer. The testicles are also placed much farther forward and suspended in separate pouches from two to four inches asunder, while those of the black bear are situated back between the thighs and in a single pouch like those of the dog: its colour is a yellowish brown, the eyes small, black, and piercing, the front of the fore legs near the feet is usually black, and the fur is finer, thicker, and deeper than that of the black bear: add to which, it is a more furious animal, and very remarkable for the wounds which it will bear without dying.
We are surrounded with deer, elk, buffaloe, antelopes, and their companions the wolves, who have become more numerous and make great ravages among them: the hills are here much more rough and high, and almost overhang the banks of the river. There are greater appearances of coal than we have hitherto seen, the stratas of it being in some places six feet thick, and there are stratas of burnt earth, which are always on the same level with those of coal. In the evening after coming twenty-five miles we encamped at the entrance of a river which empties itself into a bend on the north side of the Missouri: this stream which we called Martha's river, is about fifty yards wide, with water for fifteen yards, the banks are of earth, and steep, though not high, and the bed principally of mud. Captain Clarke, who ascended it for three miles, found that it continued of the same width with a gentle current, and pursuing its course about north 30° west, through an extensive, fertile, and beautiful valley, but without a single tree. The water is clear, and has a brownish yellow tint; at this place the highlands which yesterday and to-day had approached so near the river became lower, and receding from the water left a valley seven or eight miles wide.

Tuesday 30. The wind was high from the north-during last evening and continued so this morning: we however continued, and found the river more winding than usual and with a number of sand islands and bars, on one of which last we encamped at the distance of twenty-four miles. The low grounds are fertile and extensive but with very little timber, and that cottonwood, very bad of its kind, being too small for planks, and broken and dead at the top and unsound in the centre of the trunk. We passed some ancient lodges of driftwood which do not appear to have been lately inhabited. The game continues abundant: we killed the largest male elk we have yet seen; on placing it in its natural erect position, we found that it measured five feet three inches from the point of the hoof to the top
of the shoulder. The antelopes are yet lean and the females are with young: this fleet and quick sighted animal is generally the victim of its curiosity: when they first see the hunters they run with great velocity; if he lies down on the ground and lifts up his arm, his hat, or his foot, the antelope returns on a light trot to look at the object, and sometimes goes and returns two or three times till they approach within reach of the rifle: so too they sometimes leave their flock to go and look at the wolves who crouch down, and if the antelope be frightened at first repeat the same manœuvre, and sometimes relieve each other till they decoy it from the party when they seize it. But generally the wolves take them as they are crossing the rivers, for although swift of foot they are not good swimmers.

Wednesday, May 1. The wind was in our favour and we were enabled to use the sails till twelve o'clock, when the wind became so high and squally that we were forced to come to at the distance of ten miles on the south, in a low ground stocked with cottonwood, and remain there during the day; one of the canoes being separated from us, and not able to cross over in consequence of the high waves. The country around is more pleasant than that through which we had passed for several days, the hills being lower, the low grounds wider and better supplied with timber, which consists principally of cottonwood: the undergrowth willow on the banks and sandbars, rosebushes, redwillow, and the broad-leafed willow in the low plains, while the high country on both sides is one extensive plain without wood, though the soil is a dark, rich, mellow loam. Our hunters killed a buffaloe, an elk, a goat, and two beaver, and also a bird of the plover kind.

Thursday, 2d. The wind continued high during the night, and at daylight it began to snow and did not stop till ten o'clock, when the ground was covered an inch deep, forming a striking contrast with the vegetation which is now considerably advanced; some flowers having put forth,
and the cottonwood leaves as large as a dollar. The wind lulled about five o'clock in the afternoon, and we then proceeded along wide fertile low grounds and high level plains, and [encamped] at the distance of four miles. Our game today was deer, elk, and buffaloe: we also procured three beaver who are quite gentle, as they have not been hunted, but when the hunters are in pursuit they never leave their huts during the day: this animal we esteem a great delicacy, particularly the tail, which when boiled resembles in flavour the flesh tongues and sounds of the codfish, and is generally so large as to afford a plentiful meal for two men. One of the hunters in passing near an old Indian camp found several yards of scarlet cloth, suspended on the bough of a tree as a sacrifice to the deity by the Assiniboins: the custom of making these offerings being common among that people as indeed among all the Indians on the Missouri. The air was sharp this evening; the water froze on the oars as we rowed, and in the morning,

Friday, 3d, the weather became quite cold, the ice was a quarter of an inch thick in the kettle, and the snow still continued on the hills though it has melted from the plains. The wind too continued high from the west, but not so violently as to prevent our going on. At two miles from our encampment we passed a curious collection of bushes about thirty feet high and ten or twelve in diameter, tied in the form of a fascine and standing on end in the middle of the low ground: this too we supposed to have been left by the Indians as a religious sacrifice: at twelve o'clock the usual hour we halted for dinner. The low grounds on the river are much wider than common, sometimes extending from five to nine miles to the highlands, which are much lower than heretofore, not being more than fifty or sixty feet above the lower plain: through all this valley traces of the ancient bed of the river are every where visible, and since the hills have become lower, the stratas of coal, burnt earth, and pumicestone have in a great measure ceased,
there being in fact none to-day. At the distance of fourteen
miles we reached the mouth of a river on the north, which
from the unusual number of porcupines near it, we called
Porcupine river. This is a bold and beautiful stream one
hundred and twelve yards wide, though the water is only
forty yards at its entrance: captain Clarke who ascended it
several miles and passed it above where it enters the high-
lands, found it continued nearly of the same width and about
knee deep, and as far as he could distinguish for twenty
miles from the hills, its course was from a little to the
east of north. There was much timber on the low grounds:
he found some limestone also on the surface of the earth in
the course of his walk, and saw a range of low mountains
at a distance to the west of north, whose direction was
northwest; the adjoining country being every where level,
fertile, open, and exceedingly beautiful. The water of this
river is transparent, and is the only one that is so of all those
that fall into the Missouri: before entering a large sandbar
through which it discharges itself, its low grounds are
formed of a stiff blue and black clay, and its banks which
are from eight to ten feet high and seldom if ever overflow
are composed of the same materials. From the quantity of
water which this river contains, its direction, and the na-
ture of the country through which it passes, it is not im-
probable that its sources may be near the main body of the
Saskaskawan, and as in high water it can be no doubt navi-
gated to a considerable distance, it may be rendered the
means of intercourse with the Athabasky country, from
which the northwest company derive so many of their valua-
ble furs.

A quarter of a mile beyond this river a creek falls in on
the south, to which on account of its distance from the mouth
of the Missouri, we gave it the name of Two-thousand mile
creek: it is a bold stream with a bed thirty yards wide.
Three miles and a half above Porcupine river, we reached
some high timber on the north, and encamped just above an
old channel of the river, which is now dry. We saw vast quantities of buffaloe, elk, deer, principally of the long tailed kind, antelopes, beaver, geese, ducks, brant, and some swan. The porcupines too are numerous, and so careless and clumsy that we can approach very near without disturbing them as they are feeding on the young willows; towards evening we also found for the first time, the nest of a goose among some driftwood, all that we have hitherto seen being on the top of a broken tree on the forks, and invariably from fifteen to twenty feet or more in height.

Saturday 4. We were detained till nine in order to repair the rudder of one of the boats, and when we set out the wind was ahead; at six and a half miles we passed a small creek in a deep bend on the south with a sand island opposite to it, and then passing along an extensive plain which gradually rises from the north side of the river, encamped at the distance of eighteen miles in a point of woodland on the north: the river is this day wider than usual, and crowded with sandbars on all sides: the country is level, fertile, and beautiful, the low grounds extensive and contain a much greater portion of timber than is common: indeed all the forepart of the day the river was bordered with timber on both sides, a circumstance very rare on the Missouri, and the first that has occurred since we left the Mandans. There are as usual vast quantities of game, and extremely gentle; the male buffaloe particularly will scarcely give way to us, and as we approach will merely look at us for a moment, as something new, and then quietly resume their feeding. In the course of the day we passed some old Indian hunting camps, one of which consisted of two large lodges fortified with a circular fence, twenty or thirty feet in diameter, and made of timber laid horizontally, the beams overlaying each other to the height of five feet, and covered with the trunks and limbs of trees that have drifted down the river: the lodges themselves are formed by three or more strong sticks about the size of a man's leg or arm, and twelve feet long,
which are attached at the top by a whith of small willows, 
and spreading out so as to form at the base a circle of ten 
or fourteen feet in diameter: against these are placed pieces 
of driftwood and fallen timber, usually in three ranges one 
on the other, and the interstices are covered with leaves, 
bark, and straw, so as to form a conical figure about ten 
feet high, with a small aperture in one side for the door. 
It is, however, at best a very imperfect shelter against the 
inclemencies of the seasons.

Sunday 5. We had a fine morning, and the wind being 
from the east we used our sails. At the distance of five miles 
we came to a small island, and twelve miles farther encamp-
ed on the north, at the distance of seventeen miles. The 
country like that of yesterday is beautiful in the extreme. 
Among the vast quantities of game around us, we distin-
guish a small species of goose differing considerably from 
the common Canadian goose; its neck, head, and beak, be-
ing much thicker, larger, and shorter in proportion to its 
size, which is nearly a third smaller; the noise too resem-
bling more that of the brant or of a young goose that has 
not yet fully acquired its note; in other respects its colour, 
habits, and the number of feathers in the tail, the two spe-
cies correspond; this species also associates in flocks with 
the large geese, but we have not seen it pair off with them. 
The white brant is about the size of the common brown 
brant, or two thirds of the common goose, than which it is 
also six inches shorter from the extremity of the wings, 
though the beak, head, and neck are larger and stronger: 
the body and wings are of a beautiful pure white, except 
the black feathers of the first and second joints of the wings; 
the beak and legs are of a reddish or flesh-coloured white, 
the eye of a moderate size, the pupil of a deep sea-green in-
circled with a ring of yellowish brown, the tail consists of 
sixteen feathers equally long, the flesh is dark and as well 
as its note differs but little from those of the common brant, 
whom in form and habits it resembles, and with whom it
sometimes unites in a common flock; the white brant also associate by themselves in large flocks, but as they do not seem to be mated or paired off, it is doubtful whether they reside here during the summer for the purpose of rearing their young.

The wolves are also very abundant, and are of two species. First, the small wolf or burrowing dog of the prairies, which are found in almost all the open plains. It is of an intermediate size between the fox and dog, very delicately formed, fleet and active. The ears are large, erect, and pointed; the head long and pointed, like that of the fox; the tail long and bushy; the hair and fur of a pale reddish brown colour, though much coarser than that of the fox; the eye of a deep sea-green colour, small and piercing; the talons rather longer than those of the wolf of the Atlantic states, which animal as far as we can perceive is not to be found on this side of the river Platte. These wolves usually associate in bands of ten or twelve, and are rarely if ever seen alone, not being able singly to attack a deer or antelope. They live and rear their young in burrows, which they fix near some pass or spot much frequented by game, and sally out in a body against any animal which they think they can overpower, but on the slightest alarm retreat to their burrows making a noise exactly like that of a small dog.

The second species is lower, shorter in the legs and thicker than the Atlantic wolf; their colour, which is not affected by the seasons, is of every variety of shade, from a gray or blackish brown to a cream coloured white. They do not burrow, nor do they bark, but howl, and they frequent the woods and plains, and skulk along the skirts of the buffaloe herds, in order to attack the weary or wounded.

Captain Clarke and one of the hunters met this evening the largest brown bear we have seen. As they fired he did not attempt to attack, but fled with a most tremen-
dous roar, and such was its extraordinary tenacity of life, that although he had five balls passed through his lungs and five other wounds, he swam more than half across the river to a sandbar, and survived twenty minutes. He weighed between five and six hundred pounds at least, and measured eight feet seven inches and a half from the nose to the extremity of the hind feet, five feet ten inches and a half round the breast, three feet eleven inches round the neck, one foot eleven inches round the middle of the foreleg, and his talons, five on each foot, were four inches and three eighths in length. It differs from the common black bear in having its talons much longer and more blunt; its tail shorter; its hair of a reddish or bay brown, longer, finer, and more abundant; his liver, lungs, and heart, much larger even in proportion to his size, the heart particularly being equal to that of a large ox; his maw ten times larger; his testicles pendant from the belly and in separate pouches four inches apart: besides fish and flesh he feeds on roots, and every kind of wild fruit.

The antelope are now lean and with young, so that they may readily be caught at this season, as they cross the river from S. W. to N. E.

Monday 6. The morning being fair and the wind favourable, we set sail, and proceeded on very well the greater part of the day. The country continues level, rich, and beautiful; the low grounds wide and comparatively with the other parts of the Missouri, well supplied with wood. The appearances of coal, pumicestone, and burnt earth have ceased, though the salts of tartar or vegetable salts continue on the banks and sandbars, and sometimes in the little ravines at the base of the low hills. We passed three streams on the south; the first at the distance of one mile and a half from our camp was about twenty-five yards wide, but although it contained some water in standing pools it discharges none; this we called Littledry creek, about eight miles beyond which is Bigdry creek fifty yards wide, without any water; the
third is six miles further, and has the bed of a large river
two hundred yards wide, yet without a drop of water: like
the other two this stream, which we called Bigdry river,
continues its width undiminished as far as we can dis-
cern. The banks are low, the channel formed of a fine
brown sand, intermixed with a small proportion of little
pebbles of various colours, and the country around flat and
without trees. They had recently discharged their waters,
and from their appearance and the nature of the country
through which they pass, we concluded that they rose in the
Black mountains, or in the level low plains which are
probably between this place and the mountains; that the
country being nearly of the same kind and of the same lati-
tude, the rains of spring melting the snows about the same
time, conspire with them to throw at once vast quantities of
water down these channels, which are then left dry during
the summer, autumn, and winter, when there is very little
rain. We had to-day a slight sprinkling, but it lasted a very
short time. The game is in such plenty that it has become
a mere amusement to supply the party with provisions. We
made twenty-five miles to a clump of trees on the north where
we passed the night.

Tuesday 7. The morning was pleasant and we proceeded
at an early hour. There is much driftwood floating, and
what is contrary to our expectation, although the river is
rising, the water is somewhat clearer than usual. At eleven
o'clock the wind became so high that one of the boats was
nearly sunk, and we were obliged to stop till one, when we
proceeded on, and encamped on the south, above a large sand-
bar projecting from the north, having made fifteen miles.
On the north side of the river are the most beautiful plains
we have yet seen; they rise gradually from the low grounds
on the water to the height of fifty or sixty feet, and then ex-
tend in an unbroken level as far as the eye can reach: the
hills on the south are more broken and higher, though at
some distance back the country becomes level and fertile.
There are no more appearances of burnt earth, coal, or pumicestone, though that of salt still continues, and the vegetation seems to have advanced but little since the twenty-eighth of last month: the game is as abundant as usual. The bald-eagles, of whom we see great numbers, probably feed on the carcases of dead animals, for on the whole Missouri we have seen neither the blue-crested fisher, nor the fishing-hawks, to supply them with their favourite food, and the water of the river is so turbid that no bird which feeds exclusively on fish can procure a subsistence.

Wednesday 8. A light breeze from the east carried us sixteen miles, till we halted for dinner at the entrance of a river on the north. Captain Clarke who had walked on the south, on ascending a high point opposite to its entrance discovered a level and beautiful country which it watered; that its course for twelve or fifteen miles was N. W. when it divided into two nearly equal branches, one pursuing a direction nearly north, the other to the W. of N. W: its width at the entrance is one hundred and fifty yards, and on going three miles up, captain Lewis found it to be of the same breadth, and sometimes more; it is deep, gentle, and has a large quantity of water; its bed is principally of mud, the banks abrupt, about twelve feet in height, and formed of a dark, rich loam and blue clay; the low grounds near it are wide and fertile, and possess a considerable proportion of cottonwood and willow. It seems to be navigable for boats and canoes, and this circumstance joined to its course and the quantity of water, which indicates that it passes through a large extent of country, we are led to presume that it may approach the Saskashawan and afford a communication with that river. The water has a peculiar whiteness, such as might be produced by a tablespoon full of milk in a dish of tea, and this circumstance induced us to call it [Milk river. In the evening we had made twenty-seven miles, and encamped on the south. The country on that side consists in general of high bro-
Up the Missouri.

ken hills, with much gray, black and brown granite scattered over the surface of the ground. At a little distance from the river there is no timber on either side, the wood being confined as below to the margin of the river; so that unless the contrary is particularly mentioned, it is always understood that the upland is perfectly naked, and that we consider the low grounds well timbered if even a fifth be covered with wood. The wild liquorice is found in great abundance on these hills, as is also the white apple. As usual we are surrounded by buffaloe, elk, common and blacktailed deer, beaver, antelopes and wolves. We observed a place where an Indian had recently taken the hair off an antelope's skin, and some of the party thought they distinguished imperfectly some smoke and Indian lodges up Milk river, marks which we are by no means desirous of realizing, as the Indians are probably Assiniboins, and might be very troublesome.

Thursday, 9th. We again had a favourable wind and sailed along very well. Between four and five miles we passed a large island in a deep bend to the north, and a large sandbar at the upper point. At fifteen and a quarter miles we reached the bed of a most extraordinary river which presents itself on the south: though as wide as the Missouri itself, that is about half a mile, it does not discharge a drop of water and contains nothing but a few standing pools. On ascending it three miles we found an eminence from which we saw the direction of the channel, first south for ten or twelve miles, then turning to the east of southeast as far as we could see: it passes through a wide valley without timber, and the surrounding country consists of waving low hills interspersed with some handsome level plains; the banks are abrupt and consist of a black or yellow clay, or of a rich sandy loam, but though they do not rise more than six or eight feet above the bed, they exhibit no appearance of being overflowed: the bed is entirely composed of a light brown sand, the particles of which like
those of the Missouri are extremely fine. Like the dry rivers we passed before, this seemed to have discharged its waters recently, but the watermark indicated that its greatest depth had not been more than two feet: this stream, if it deserve the name, we called Bigdry river. About a mile below is a large creek on the same side, which is also perfectly dry: the mineral salts and quartz are in large quantities near this neighbourhood. The sand of the Missouri from its mouth to this place has been mixed with a substance which we had presumed to be a granulated talk, but which is most probably this quartz. The game is now in great quantities, particularly the elk and buffaloe, which last is so gentle that the men are obliged to drive them out of the way with sticks and stones. The ravages of the beaver are very apparent in one place the timber was entirely prostrated for a space of three acres in front on the river and one in depth, and great part of it removed, although the trees were in large quantities, and some of them as thick as the body of a man. At the distance of twenty-four miles we encamped, after making twenty-five and a half miles, at the entrance of a small creek in a bend on the north, to which we gave the name of Werner's creek after one of our men.

For several days past the river has been as wide as it generally is near its mouth, but as it is much shallower, crowded with sandbars, and the colour of the water has become much clearer, we do not yet despair of reaching the Rock mountains, for which we are very anxious.

Friday, 10th. We had not proceeded more than four and a quarter miles when the violence of the wind forced us to halt for the day under some timber in a bend on the south side. The wind continued high, the clouds thick and black, and we had a slight sprinkling of rain several times in the course of the day. Shortly after our landing a dog came to us, and as this induced us to believe that we are near the hunting grounds of the Assiniboins, who are a vicious
ill-disposed people, it was necessary to be on our guard: we therefore inspected our arms which we found in good order, and sent several hunters to scour the country, but they returned in the evening having seen no tents, nor any recent tracks of Indians. Biles and imposthumes are very common among the party, and sore eyes continue in a greater or less degree with all of us; for the imposthumes we use emollient poultices, and apply to the eyes a solution of two grains of white vitriol and one of sugar of lead with one ounce of water.

Saturday, 11th. The wind blew very hard in the night, but having abated this morning we went on very well, till in the afternoon the wind arose and retarded our progress; the current too was strong, the river very crooked, and the banks as usual constantly precipitating themselves in large masses into the water. The highlands are broken and approach nearer the river than they do below. The soil however of both hills and low grounds appear as fertile as that further down the river: it consists of a black looking loam with a small portion of sand, which cover the hills and bluffs to the depth of twenty or thirty feet, and when thrown in the water dissolves as readily as loaf-sugar, and effervesces like marle: there are also great appearances of quartz and mineral salts: the first is most commonly seen in the faces of the bluffs, the second is found on the hills as well as the low grounds, and in the gullies which come down from the hills; it lies in a crust of two or three inches in depth, and may be swept up with a feather in large quantities. There is no longer any appearance of coal burnt earth or pumicestone. We saw and visited some high hills on the north side about three miles from the river, whose tops were covered with the pitch-pine: this is the first pine we have seen on the Missouri, and it is like that of Virginia, except that the leaves are somewhat longer: among this pine is also a dwarf cedar, sometimes between three or four feet high, but generally spreading itself like a vine along the surface
The fruit and smell resemble those of the common red cedar, but the leaf is finer and more delicate. The tops of the hills where these plants grow have a soil quite different from that just described, the basis of it is usually yellow or white clay, and the general appearance light coloured, sandy, and barren, some scattering tufts of sedge being almost its only herbage.

About five in the afternoon one of our men who had been afflicted with biles, and suffered to walk on shore, came running to the boats with loud cries and every symptom of terror and distress: for some time after we had taken him on board he was so much out of breath as to be unable to describe the cause of his anxiety, but he at length told us that about a mile and a half below he had shot a brown bear which immediately turned and was in close pursuit of him; but the bear being badly wounded could not overtake him. Captain Lewis with seven men immediately went in search of him, and having found his track followed him by the blood for a mile, and found him concealed in some thick brushwood, and shot him with two balls through the skull. Though somewhat smaller than that killed a few days ago, he was a monstrous animal and a most terrible enemy: our man had shot him through the centre of the lungs, yet he had pursued him furiously for half a mile, then returned more than twice that distance, and with his talons had prepared himself a bed in the earth two feet deep and five feet long, and was perfectly alive when they found him, which was at least two hours after he received the wound. The wonderful power of life which these animals possess render them dreadful: their very track in the mud or sand, which we have sometimes found eleven inches long and seven and a quarter wide, exclusive of the talons, is alarming; and we had rather encounter two Indians than meet a single brown bear. There is no chance of killing them by a single shot unless the ball goes through the brains, and this is very difficult.
on account of two large muscles which cover the side of the forehead, and the sharp projection of the centre of the frontal bone, which is also thick. Our encampment was on the south at the distance of sixteen miles from that of last night: the fleece and skin of the bear were a heavy burden for two men, and the oil amounted to eight gallons.

Sunday, 12th. The weather being clear and calm, we set out early. Within a mile we came to a small creek, about twenty yards wide, emptying itself on the south. At eleven and three quarter miles we reached a point of woodland on the south, opposite to which is a creek of the same width as the last, but with little water, which we called Pine creek. At eighteen and three quarter miles we came to on the south opposite to the lower point of a willow island, situated in a deep bend of the river to the southeast: here we remained during the day, the wind having risen at twelve so high that we could not proceed: it continued to blow violently all night, with occasional sprinklings of rain from sunset till midnight. On both sides of the river the country is rough and broken, the low grounds becoming narrower; the tops of the hills on the north exhibits some scattered pine and cedar, on the south the pine has not yet commenced, though there is some cedar on the sides of the hills and in the little ravines. The chokecherry, the wild hysop, sage, fleshy-leafed thorn, and particularly the aromatic herb on which the antelope and hare feed, are to be found on the plains and hills. The soil of the hills has now altered its texture considerably: their bases, like that of the river plains, is as usual a rich, black loam, while from the middle to the summits they are composed of a light brown-coloured earth, poor and sterile, and intermixed with a coarse white sand.

Monday, 13th. The wind was so strong that we could not proceed till about one o'clock, when we had to encounter a current rather stronger than usual. In the course of a mile and a half we passed two small creeks on the south.
one of eighteen the other of thirty yards width, but neither of them containing any water, and encamped on the south at a point of woodland, having made only seven miles. The country is much the same as yesterday, with little timber in the low grounds, and a small quantity of pine and cedar on the northern hills. The river however continues to grow clearer, and this as well as the increased rapidity induces us to hope for some change of country. The game is as usual so abundant that we can get without difficulty all that is necessary.

Tuesday, 14th. There was some fog on the river this morning, which is a very rare occurrence. At the distance of a mile and a half we reached an island in a bend on the north, which continued for about half a mile, when at the head of it a large creek comes in on the north, to which we gave the name of Gibson’s creek. At seven and a half miles is a point of rocks on the south, above a creek on the same side, which we called Sticklodge creek: five miles further is a large creek on the south, which like the two others has no running water; and at sixteen and a half miles a timbered point on the north, where we encamped for the night. The country is like that of yesterday, except that the low grounds are wider: there are also many high black bluffs along the banks: the game too is in great abundance. Towards evening the men in the hindmost canoes discovered a large brown bear lying in the open grounds, about three hundred paces from the river: six of them, all good hunters, immediately went to attack him, and concealing themselves by a small eminence came unperceived within forty paces of him: four of the hunters now fired, and each lodged a ball in his body, two of them directly through the lungs: the furious animal sprung up and ran openmouthed upon them; as he came near, the two hunters who had reserved their fire gave him two wounds, one of which breaking his shoulder retarded his motion for a moment; but before they could reload he was so near that they were obliged to run to the
river, and before they reached it he had almost overtaken them: two jumped into the canoe; the other four separated, and concealing themselves in the willows fired as fast as each could reload: they struck him several times, but instead of weakening the monster each shot seemed only to direct him towards the hunter, till at last he pursued two of them so closely, that they threw aside their guns and pouches, and jumped down a perpendicular bank of twenty feet into the river; the bear sprang after them, and was within a few feet of the hindmost, when one of the hunters on shore shot him in the head and finally killed him: they dragged him to the shore, and found that eight balls had passed through him in different directions; the bear was old and the meat tough, so that they took the skin only, and rejoined us at camp, where we had been as much terrified by an accident of a different kind. This was the narrow escape of one of our canoes containing all our papers, instruments, medicine, and almost every article indispensible for the success of our enterprise. The canoe being under sail, a sudden squall of wind struck her obliquely, and turned her considerably. The man at the helm, who was unluckily the worst steersman of the party, became alarmed, and instead of putting her before the wind luffed her up into it. The wind was so high that it forced the brace of the square-sail out of the hand of the man who was attending it, and instantly upset the canoe, which would have been turned bottom upwards but for the resistance made by the awning. Such was the confusion on board, and the waves ran so high, that it was half a minute before she righted, and then nearly full of water, but by baling out she was kept from sinking until they rowed ashore: besides the loss of the lives of three men who not being able to swim would probably have perished, we should have been deprived of nearly every thing necessary for our purposes, at a distance of between two and three thousand miles from any place where we could supply the deficiency.

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Wednesday 15. As soon as a slight shower of rain had passed, we spread out the articles to dry; but the weather was so damp and cloudy that they derived little benefit from exposure. Our hunters procured us deer, buffaloe, and beaver.

Thursday 16. The morning was fair and we were enabled to dry and repack our stores: the loss we sustained is chiefly in the medicines, many articles of which are completely spoiled, and others considerably injured. At four o'clock we embarked, and after making seven miles encamped on the north near some wood: the country on both sides is broken, the low grounds narrower and with less timber, though there are some scattered pine and cedar on the steep declivities of the hills, which are now higher than usual. A white bear tore the coat of one of the men which he had left on shore; and two of the party wounded a large panther who was feasting on a deer. We caught some lean antelopes as they were swimming the river, and killed two buffaloe.

Friday 17. We set out early and proceeded on very well; the banks being firm and the shore bold we were enabled to use the towline, which, whenever the banks will permit it, is the safest and most expeditious mode of ascending the river, except under a sail with a steady breeze. At the distance of ten and a half miles we came to the mouth of a small creek on the south, below which the hills approach the river, and continue near it during the day: three miles further is a large creek on the north, and again six and three quarter miles beyond it, another large creek to the south, which contain a small quantity of running water of a brackish taste. The last we called Rattlesnake creek from our seeing that animal near it. Although no timber can be observed on it from the Missouri, it throws out large quantities of driftwood, among which were some pieces of coal brought down by the stream. We continued on one mile and a quarter, and encamped on the south after making
twenty and a half miles. The country in general is rugged, the hills high, with their summits and sides partially covered with pine and cedar, and their bases on both sides washed by the river: like those already mentioned the lower part of these hills is a dark rich loam, while the upper region for one hundred and fifty feet consists of a whitish brown sand, so hard as in many places to resemble stone, though in fact very little stone or rock of any kind is to be seen on the hills. The bed of the Missouri is much narrower than usual, being not more than between two and three hundred yards in width, with an uncommonly large proportion of gravel; but the sandbars, and low points covered with willows have almost entirely disappeared: the timber on the river consists of scarcely any thing more than a few scattered cottonwood trees. The saline incrustations along the banks and the foot of the hills are more abundant than usual. The game is in great quantities, but the buffaloe are not so numerous as they were some days ago: two rattlesnakes were seen to-day, and one of them killed: it resembles those of the middle Atlantic states, being about two feet six inches long, of a yellowish brown on the back and sides, variegated with a row of oval dark brown spots lying transversely on the back from the neck to the tail, and two other rows of circular spots of the same colour on the sides along the edge of the scuta: there are one hundred and seventy-six scuta on the belly, and seventeen on the tail. Captain Clarke saw in his excursions a fortified Indian camp which appeared to have been recently occupied, and was, we presumed, made by a party of Minnetarees who went to war last March.

Late at night we were roused by the sergeant of the guard in consequence of a fire which had communicated to a tree overhanging our camp. The wind was so high, that we had not removed the camp more than a few minutes when a large part of the tree fell precisely on the spot it had occupied, and would have crushed us if we had not been alarmed in time.
Saturday 18. The wind continued high from the west, but by means of the towline we were able to make nineteen miles, the sandbars being now few in number, the river narrow and the current gentle; the willow has in a great measure disappeared, and even the cottonwood, almost the only timber remaining, is growing scarce. At twelve and three quarter miles we came to a creek on the north, which was perfectly dry. We encamped on the south opposite the lower point of an island.

Sunday 19. The last night was disagreeably cold; and in the morning there was a very heavy fog which obscured the river so much as to prevent our seeing the way. This is the first fog of any degree of thickness which we have experienced: there was also last evening a fall of dew, the second which we have seen since entering this extensive open country. About eight o’clock the fog dispersed, and we proceeded with the aid of the towline: the island near which we were encamped, was three quarters of a mile in length. The country resembles that of yesterday, high hills closely bordering the river. In the afternoon the river became crooked, and contained more sawyers or floating timber than we have seen in the same space since leaving the Platte. Our game consisted of deer, beaver, and elk: we also killed a brown bear, who, although shot through the heart, ran at his usual pace nearly a quarter of a mile before he fell. At twenty-one miles is a willow island half a mile in length, on the north side, a quarter of a mile beyond which is a shoal of rapid water under a bluff: the water continued very strong for some distance beyond it: at half a mile we came to a sandbar on the north, from which to our place of encampment was another half mile, making in all twenty-two and a quarter miles. The saline substances which we have mentioned continue to appear; and the men are much afflicted with sore eyes and imposthumes.

Monday 20. As usual we set out early, and the banks being convenient for that purpose, we used the towline:
the river is narrow and crooked, the water rapid, and the
country much like that of yesterday: at the distance of two
and a quarter miles we passed a large creek with but little
water, to which we gave the name of Blowingfly creek,
from the quantity of those insects found in its neighbour-
hood. They are extremely troublesome, infesting our meat
whilst cooking and at our meals. After making seven miles
we reached by eleven o' clock the mouth of a large river on
the south, and encamped for the day at the upper point of
its junction with the Missouri. This stream which we sup-
pose to be that called by the Minnetarees the Muscleshell
river, empties into the Missouri two thousand two hundred
and seventy miles above the mouth of the latter river, and
in latitude 47º 0’ 24” 6 north. It is one hundred and ten
yards wide, and contains more water than streams of that
size usually do in this country; its current is by no means
rapid, and there is every appearance of its being suscepti-
ble of navigation by canoes for a considerable distance: its
bed is chiefly formed of coarse sand and gravel, with an oc-
casional mixture of black mud; the banks abrupt and nearly
twelve feet high, so that they are secure from being over-
flowed: the water is of a greenish yellow cast and much
more transparent than that of the Missouri, which itself,
though clearer than below, still retains its whitish hue and
a portion of its sediment. Opposite to the point of junction
the current of the Missouri is gentle, and two hundred and
twenty-two yards in width, the bed principally of mud (the
little sand remaining being wholly confined to the points)
and still too deep to use the settingpole. If this be, as we
suppose, the Muscleshell, our Indian information is, that
it rises in the first chain of the Rocky mountains not far
from the sources of the Yellowstone, whence in its course
to this place it waters a high broken country, well timbered
particularly on its borders, and interspersed with handsome
fertile plains and meadows. We have reason, however, to
believe, from their giving a similar account of the timber
where we now are, that the timber of which they speak is similar to that which we have seen for a few days past, which consists of nothing more than a few straggling small pine and dwarf cedar, on the summits of the hills, nine-tenths of the ground being totally destitute of wood, and covered with a short grass, aromatic herbs, and an immense quantity of prickly pears: though the party who explored it for eight miles represented low grounds on the river as well supplied with cottonwood of a tolerable size, and of an excellent soil. They also reported that the country is broken and irregular like that near our camp; that about five miles up a handsome river about fifty yards wide, which we named after Chaboneau's wife, Saheajahweah, or Birdwoman's river, discharges itself into the Muscleshell on the north or upper side. Another party found at the foot of the southern hills, about four miles from the Missouri, a fine bold spring, which in this country is so rare that since we left the Mandans we have found only one of a similar kind, and that was under the bluffs on the south side of the Missouri, at some distance from it, and about five miles below the Yellowstone: with this exception all the small fountains of which we have met a number are impregnated with the salts which are so abundant here, and with which the Missouri is itself most probably tainted, though to us who have been so much accustomed to it, the taste is not perceptible. Among the game to-day we observed two large owls, with remarkably long feathers resembling ears on the sides of the head, which we presume are the hooting owls, though they are larger and their colours are brighter than those common in the United States.

Tuesday 21. The morning being very fine we were able to employ the rope, and made twenty miles to our camp on the north. The shores of the river are abrupt, bold and composed of a black and yellow clay, the bars being formed of black mud, and a small proportion of fine sand; the current strong. In its course the Missouri makes a sudden
and extensive bend towards the south, to receive the waters of the **Muscleshell**. The neck of land thus formed, though itself high is lower than the surrounding country, and makes a waving valley extending for a great distance to the northward, with a fertile soil which, though without wood, produces a fine turf of low grass, some herbs and vast quantities of prickly pear. The country on the south is high, broken, and crowned with some pine and dwarf cedar; the leaf of this pine is longer than that of the common pitch or red pine of Virginia, the cone is longer and narrower, the imbrications wider and thicker, and the whole frequently covered with rosin. During the whole day the bends of the river are short and sudden; and the points covered with some cottonwood, large or broad leaved willow, and a small quantity of redwood; the undergrowth consisting of wild roses, and the bushes of the small honeysuckle.

The mineral appearances on the river are as usual. We do not find the grouse or prairie hen so abundant as below, and think it probable that they retire from the river to the plains during this season.

The wind had been moderate during the fore part of the day, but continued to rise towards evening, and about dark veered to northwest, and blew a storm all night. We had encamped on a bar on the north, opposite the lower point of an island, which from this circumstance we called Windy island; but we were so annoyed by clouds of dust and sand that we could neither eat nor sleep, and were forced to remove our camp at eight o'clock to the foot of an adjoining hill, which shielded us in some degree from the wind: we procured elk, deer, and buffaloe.

Wednesday 22. The wind blew so violently that it was deemed prudent to wait till it had abated, so that we did not leave the camp till ten o'clock, when we proceeded principally by the towline. We passed **Windy island** which is about three quarters of a mile in length: and five and a half miles above it a large island in a bend to the north:
three miles beyond this we came to the entrance of a creek twenty yards wide, though with little water, which we called **Grouse creek**, from observing near its mouth a quantity of the prairie hen with pointed tails, the first we have seen in such numbers for several days: the low grounds are somewhat wider than usual and apparently fertile, though the short and scanty grass on the hills does not indicate much richness of soil. The country around is not so broken as that of yesterday, but is still waving, the southern hills possessing more pine than usual, and some appearing on the northern hills, which are accompanied by the usual salt and mineral appearances.

The river continues about two hundred and fifty yards wide, with fewer sandbars, and the current more gentle and regular. Game is no longer in such abundance, since leaving the **Muscleshell**. We have caught very few fish on this side of the Mandans, and these were the white catfish of two to five pounds. We killed a deer and a bear: we have not seen in this quarter the black bear, common in the United States and on the lower parts of the Missouri, nor have we discerned any of their tracks, which may easily be distinguished by the shortness of its talons from the brown, grizzly, or white bear, all of which seem to be of the same family, which assumes those colours at different seasons of the year. We halted earlier than usual, and **encamped** on the north, in a point of woods, at the distance of sixteen and a half miles.
CHAPTER IX.

The party continue their route—description of Judith river—Indian mode of taking the buffaloe—Slaughter river described—phenomena of nature—of walls on the banks of the Missouri—the party encamp on the banks of the river to ascertain which of the streams constitute the Missouri—captain Lewis leaves the party to explore the northern fork, and captain Clarke explores the southern—the surrounding country described in the route of captain Lewis—narrow escape of one of his party.

Thursday 23. LAST night the frost was severe, and this morning the ice appeared along the edges of the river, and the water froze on our ears. At the distance of a mile we passed the entrance of a creek on the north, which we named Teapot creek; it is fifteen yards wide, and although it has running water at a small distance from its mouth, yet it discharges none into the Missouri, resembling, we believe, most of the creeks in this hilly country, the waters of which are absorbed by the thirsty soil near the river. They indeed afford but little water in any part, and even that is so strongly tainted with salts that it is unfit for use, though all the wild animals are very fond of it. On experiment it was found to be moderately purgative, but painful to the intestines in its operation. This creek seems to come from a range of low hills, which run from east to west for seventy miles, and have their eastern extremity thirty miles to the north of Teapot creek. Just above its entrance is a large assemblage of the burrowing squirrels on the north side of the river. At nine miles we reached the upper point of an island in a bend on the south, and opposite the centre of the island, a small dry creek on the north. Half a mile further a small creek falls in on the same side; and six and a half miles beyond this another on the south. At four and a half
we passed a small island in a deep bend to the north, and on
the same side in a deep northeastern bend of the river an-
other small island. None of these creeks however possessed
any water, and at the entrances of the islands, the two first
are covered with tall cottonwood timber, and the last with
willows only. The river has become more rapid, the coun-
try much the same as yesterday, except that there is rather
more rocks on the face of the hills, and some small spruce pine
appears among the pitch. The wild roses are very abundant
and now in bloom; they differ from those of the United States
only in having the leaves and the bush itself of a somewhat
smaller size. We find the musquitoes troublesome, not-
withstanding the coolness of the morning. The buffaloe is
scarce to-day, but the elk, deer, and antelope, are very
numerous. The geese begin to lose the feathers of the
wings, and are unable to fly. We saw five bears, one of
which we wounded, but in swimming from us across the
river, he become entangled in some driftwood and sank.
We formed our camp on the north opposite to a hill and a
point of wood in a bend to the south, having made twenty-
seven miles.

Friday 24. The water in the kettles froze one eighth of
an inch during the night; the ice appears along the margin
of the river, and the cottonwood-trees which have lost near-
ly all their leaves by the frost, are putting forth other buds.
We proceeded with the line principally till about nine o'clock,
when a fine breeze sprung up from the S. E. and enabled us
to sail very well, notwithstanding the rapidity of the cur-
rent. At one mile and a half is a large creek thirty yards
wide, and containing some water which it empties on the
north side, over a gravelly bed, intermixed with some stone.
A man who was sent up to explore the country returned in
the evening, after having gone ten miles directly towards
the ridge of mountains to the north, which is the source
of this as well as of Teapot creek. The air of these high-
lands is so pure, that objects appear much nearer than
they really are, so that although our man went ten miles without thinking himself by any means half way to the mountains, they do not from the river appear more than fifteen miles distant; this stream we called Northmoun-
tain creek. Two and a half miles higher is a creek on the south which is fifteen yards wide, but without any water, and to which we gave the name of Littledog creek, from a village of burrowing squirrels opposite to its entrance, that being the name given by the French watermen to those animals. Three miles from this a small creek enters on the north, five beyond which is an island a quarter of a mile in length, and two miles further a small river: this falls in on the south, is forty yards wide, and discharges a handsome stream of water; its bed rocky with gravel and sand, and the banks high: we called it Southmountain creek, as from its direction it seemed to rise in a range of mountains about fifty or sixty miles to the S. W. of its entrance. The low grounds are narrow and without timber; the country high and broken; a large portion of black rock, and brown sandy rock appears in the face of the hills, the tops of which are covered with scattered pine, spruce and dwarf cedar; the soil is generally poor, sandy near the tops of the hills, and nowhere producing much grass, the low grounds being covered with little else than the hysop, or southern wood, and the pulpy-leafed thorn. Game is more scarce, particularly beaver, of which we have seen but few for several days, and the abundance or scarcity of which seems to depend on the greater or less quantity of timber. At twenty-four and a half miles we reached a point of wood-
land on the south, where we observed that the trees had no leaves, and encamped for the night. The high country through which we have passed for some days, and where we now are, we suppose to be a continuation of what the French traders called the Cote Noire or Black hills. The country thus denominated consists of high broken irregular hills and short chains of mountains, sometimes one hundred
and twenty miles in width, sometimes narrower, but always much higher than the country on either side. They commence about the head of the Kanzas, where they diverge; the first ridge going westward, along the northern shore of the Arkansaw; the second approaches the Rock mountains obliquely in a course a little to the W. of N. W. and after passing the Platte above its forks, and intersecting the Yellowstone near the Bigbend, crosses the Missouri at this place, and probably swell the country as far as the Saskashawan, though as they are represented much smaller here than to the south, they may not reach that river.

Saturday, 25th. Two canoes which were left behind yesterday to bring on the game, did not join us till eight o'clock this morning, when we set out with the towline, the use of which the banks permitted. The wind was, however, ahead, the current strong, particularly round the points against which it happened to set, and the gullies from the hills having brought down quantities of stone, these projected into the river, forming barriers for forty or fifty feet round, which it was very difficult to pass. At the distance of two and three quarter miles we passed a small island in a deep bend on the south, and on the same side a creek twenty yards wide, but with no running water. About a mile further is an island between two and three miles in length, separated from the northern shore by a narrow channel, in which is a sand island at the distance of half a mile from its lower extremity. To this large island we gave the name of Teapot island; two miles above which is an island a mile long, and situated on the south. At three and a half miles is another small island, and one mile beyond it a second three quarters of a mile in length, on the north side. In the middle of the river two miles above this is an island with no timber, and of the same extent as this last. The country on each side is high, broken, and rocky; the rock being either a soft brown sandstone, covered with a thin stratum of limestone, or else a hard black rug-
ged granite, both usually in horizontal stratas, and the sandrock overlaying the other. Salts and quartz as well as some coal and pumicestone still appear: the bars of the river are composed principally of gravel; the river low grounds are narrow, and afford scarcely any timber; nor is there much pine on the hills. The buffaloe have now become scarce: we saw a polecat this evening, which was the first for several days: in the course of the day we also saw several herds of the big-horned animals among the steep cliffs on the north, and killed several of them. At the distance of eighteen miles we encamped on the south, and the next morning,

Sunday, 26th, proceeded on at an early hour by means of the towline, using our oars merely in passing the river, to take advantage of the best banks. There are now scarcely any low grounds on the river, the hills being high and in many places pressing on both sides to the verge of the water. The black rock has given place to a very soft sandstone, which seems to be washed away fast by the river, and being thrown into the river renders its navigation more difficult than it was yesterday: above this sandstone, and towards the summits of the hills, a hard freestone of a yellowish brown colour shows itself in several stratas of unequal thickness, frequently overlaid or incrusted by a thin stratum of limestone, which seems to be formed of concreted shells. At eight and a quarter miles we came to the mouth of a creek on the north, thirty yards wide, with some running water and a rocky bed: we called it Windsor creek, after one of the party. Four and three quarter miles beyond this we came to another creek in a bend to the north, which is twenty yards wide, with a handsome little stream of water: there is however no timber on either side of the river, except a few pines on the hills. Here we saw for the first time since we left the Mandans several soft shelled turtles, though this may be owing rather to the season of the year than to any scarcity of the animal. It was here
that after ascending the highest summits of the hills on the north side of the river, that captain Lewis first caught a distant view of the Rock mountains, the object of all our hopes, and the reward of all our ambition. On both sides of the river and at no great distance from it, the mountains followed its course: above these, at the distance of fifty miles from us, an irregular range of mountains spread themselves from west to northwest from his position. To the north of these a few elevated points, the most remarkable of which bore north 65° west, appeared above the horizon, and as the sun shone on the snows of their summits he obtained a clear and satisfactory view of those mountains which close on the Missouri the passage to the Pacific. Four and a half miles beyond this creek we came to the upper point of a small sand island. At the distance of five miles between high bluffs, we passed a very difficult rapid, reaching quite across the river, where the water is deep, the channel narrow, and gravel obstructing it on each side: we had great difficulty in ascending it, although we used both the rope and the pole, and doubled the crews: this is the most considerable rapid on the Missouri, and in fact the only place where there is a sudden descent: as we were labouring over them, a female elk with its fawn swam down through the waves, which ran very high, and obtained for the place the name of the Elk Rapids. Just above them is a small low ground of cottonwood trees, where, at twenty-two and a quarter miles we fixed our encampment and were joined by captain Lewis, who had been on the hills during the afternoon.

The country has now become desert and barren: the appearances of coal, burnt earth, pumicestone, salts, and quartz, continue as yesterday: but there is no timber except the thinly scattered pine and spruce on the summits of the hills, or along the sides. The only animals we have observed are the elk, the bighorn, and the hare, common in this country. In the plain where we lie are two Indian
cabins made of sticks, and during the last few days we have passed several others in the points of timber on the river.

Monday, 27. The wind was so high that we did not start till ten o'clock, and even then were obliged to use the line during the greater part of the day. The river has become very rapid with a very perceptible descent: its general width is about two hundred yards: the shoals too are more frequent, and the rocky points at the mouth of the gullies more troublesome to pass: great quantities of this stone lie in the river and on its banks, and seem to have fallen down as the rain washed away the clay and sand in which they were imbedded. The water is bordered by high rugged bluffs, composed of irregular but horizontal stratas of yellow and brown or black clay, brown and yellowish white sand, soft yellowish white sandstone: hard dark brown freestone; and also large round kidney formed irregular separate masses of a hard black ironstone, imbedded in the clay and sand; some coal or carbonated wood also makes its appearance in the cliffs, as do also its usual attendants the pumicestone and burnt earth. The salts and quartz are less abundant, and generally speaking the country is if possible more rugged and barren than that we passed yesterday: the only growth of the hills being a few pine, spruce, and dwarf cedar, interspersed with an occasional contrast once in the course of some miles, of several acres of level ground, which supply a scanty subsistence for a few little cottonwood trees.

Soon after setting out we passed a small untimbered island on the south: at about seven miles we reached a considerable bend which the river makes towards the southeast, and in the evening, after making twelve and a half miles, encamped on the south near two dead cottonwood trees, the only timber for fuel which we could discover in the neighbourhood.

Tuesday, 28. The weather was dark and cloudy; the air smoky, and there fell a few drops of rain. At ten o'clock
we had again a slight sprinkling of rain, attended with dis-
tant thunder, which is the first we have heard since leaving
the Mandans. We employed the line generally, with the
addition of the pole at the ripples and rocky points, which
we find more numerous and troublesome than those we pas-
sed yesterday. The water is very rapid round these points,
and we are sometimes obliged to steer the canoes through
the points of sharp rocks rising a few inches above the sur-
f ace of the water, and so near to each other that if our
ropes give way the force of the current drives the sides of
the canoe against them, and must inevitably upset them or
dash them to pieces. These cords are very slender, being
almost all made of elkskin, and much worn and rotted by
exposure to the weather: several times they gave way, but
fortunately always in places where there was room for the
canoe to turn without striking the rock; yet with all our
precautions it was with infinite risk and labour that we pas-
sed these points. An Indian pole for building floated down
the river, and was worn at one end as if dragged along the
ground in travelling; several other articles were also brought
down by the current, which indicate that the Indians are
probably at no great distance above us, and judging from a
football which resembles those used by the Minnetarees
near the Mandans, we conjecture that they must be a band
of the Minnetarees of fort de Prairie. The appearance of
the river and the surrounding country continued as usual,
till towards evening, at about fifteen miles, we reached a
large creek on the north thirty-five yards wide, discharg-
ing some water, and named after one of our men [Thomp-
sen's creek]. Here the country assumed a totally different
aspect; the hills retired on both sides from the river, which
now spreads to more than three times its former size, and
is filled with a number of small handsome islands covered
with cottonwood. The low grounds on the river are again
wide, fertile, and enriched with trees; those on the north
are particularly wide, the hills being comparatively low and
opening into three large vallies, which extend themselves for a considerable distance towards the north; these appearances of vegetation are delightful after the dreary hills over which we have passed, and we have now to congratulate ourselves at having escaped from the last ridges of the Black mountains. On leaving Thompson's creek we passed two small islands, and at twenty-three miles distance encamped among some timber on the north, opposite to a small creek, which we named Bull creek. The big-horn is in great quantities, and must bring forth their young at a very early season, as they are now half grown. One of the party saw a large bear also, but being at a distance from the river, and having no timber to conceal him, he would not venture to fire.

Wednesday, 29. Last night we were alarmed by a new sort of enemy. A buffaloe swam over from the opposite side and to the spot where lay one of our canoes, over which he clambered to the shore; then taking fright he ran full speed up the bank towards our fires, and passed within eighteen inches of the heads of some of the men, before the sentinel could make him change his course: still more alarmed he ran down between four fires and within a few inches of the heads of a second row of the men, and would have broken into our lodge if the barking of the dog had not stopped him. He suddenly turned to the right and was out of sight in a moment, leaving us all in confusion, every one seizing his rifle and inquiring the cause of the alarm. On learning what had happened, we had to rejoice at suffering no more injury than the damage to some guns which were in the canoe which the buffaloe crossed.

In the morning early we left our camp, and proceeded as usual by the cord. We passed an island and two sandbars, and at the distance of two and a half miles we came to a handsome river which discharges itself on the south, and which we ascended to the distance of a mile and a half: we called it Judith's river: it rises in the Rock mountains
in about the same place with the Muscleshell and near the Yellowstone river. Its entrance is one hundred yards wide from one bank to the other, the water occupying about seventy-five yards, and in greater quantity than that of the Muscleshell river, and though more rapid equally navigable, there being no stones or rocks in the bed, which is composed entirely of gravel and mud with some sand: the water too is clearer than any which we have yet seen; and the low grounds, as far as we could discern, wider and more woody than those of the Missouri: along its banks we observed some box-alder intermixed with the cottonwood and the willow; the undergrowth consisting of rosebushes, honeysuckles, and a little red willow. There was a great abundance of the argalea or bighorned animals in the high country through which it passes, and a great number of the beaver in its waters: just above the entrance of it we saw the fires of one hundred and twenty-six lodges, which appeared to have been deserted about twelve or fifteen days, and on the other side of the Missouri a large encampment, apparently made by the same nation. On examining some moccasins which we found there, our Indian woman said that they did not belong to her own nation the Snake Indians, but she thought that they indicated a tribe on this side of the Rocky mountain, and to the north of the Missouri: indeed it is probable that these are the Minnetarces of fort de Prairie. At the distance of six and a half miles the hills again approach the brink of the river, and the stones and rocks washed down from them form a very bad rapid, with rocks and ripples more numerous and difficult than those we passed on the 27th and 28th: here the same scene was renewed, and we had again to struggle and labour to preserve our small craft from being lost. Near this spot are a few trees of the ash, the first we have seen for a great distance, and from which we named the place Ash Rapids. On these hills there is but little timber, but the salts, coal, and other mineral appearances continue. On the north we
passed a precipice about one hundred and twenty feet high, under which lay scattered the fragments of at least one hundred careases of buffaloes, although the water which had washed away the lower part of the hill must have carried off many of the dead. These buffaloes had been chased down the precipice in a way very common on the Missouri, and by which vast herds are destroyed in a moment. The mode of hunting is to select one of the most active and fleet young men, who is disguised by a buffaloe skin round his body; the skin of the head with the ears and horns fastened on his own head in such a way as to deceive the buffaloe: thus dressed, he fixes himself at a convenient distance between a herd of buffaloe and any of the river precipices, which sometimes extend for some miles. His companions in the meantime get in the rear and side of the herd, and at a given signal show themselves, and advance towards the buffaloe: they instantly take the alarm, and finding the hunters beside them, they run towards the disguised Indian or decoy, who leads them on at full speed toward the river, when suddenly securing himself in some crevice of the cliff which he had previously fixed on, the herd is left on the brink of the precipice: it is then in vain for the foremost to retreat or even to stop; they are pressed on by the hindmost rank, who seeing no danger but from the hunters, goad on those before them till the whole are precipitated and the shore is strewed with their dead bodies. Sometimes in this perilous seduction the Indian is himself either trodden under foot by the rapid movements of the buffaloe, or missing his footing in the cliff is urged down the precipice by the falling herd. The Indians then select as much meat as they wish, and the rest is abandoned to the wolves, and create a most dreadful stench. The wolves who had been feasting on these careases were very fat, and so gentle that one of them was killed with an esponton. Above this place we came to for dinner at the distance of seventeen miles, opposite to a bold running river of twenty yards wide, and
falling in on the south. From the objects we had just passed we called this stream **Slaughter river**. Its low grounds are narrow, and contain scarcely any timber. Soon after landing it began to blow and rain, and as there was no prospect of getting wood for fuel farther on, we **fixed our camp** on the north, three quarters of a mile above Slaughter river. After the labours of the day we gave to each man a dram, and such was the effect of long abstinence from spirituous liquors, that from the small quantity of half a gill of rum, several of the men were considerably affected by it, and all very much exhilarated. Our game to-day consisted of an elk and two beaver.

**Thursday, 30.** The rain which commenced last evening continued with little intermission till eleven this morning, when the high wind which accompanied it having abated, we set out. More rain has now fallen than we have had since the 1st of September last, and many circumstances indicate our approach to a climate differing considerably from that of the country through which we have been passing: the air of the open country is astonishingly dry and pure. Observing that the case of our sextant, though perfectly seasoned, shrank and the joints opened, we tried several experiments, by which it appeared that a tablespoon full of water exposed in a saucer to the air would evaporate in thirty-six hours, when the mercury did not stand higher than the temperate point at the greatest heat of the day. The river, notwithstanding the rain, is much clearer than it was a few days past; but we advance with great labour and difficulty; the rapid current, the ripples and rocky points rendering the navigation more embarrassing than even that of yesterday, in addition to which the banks are now so slippery after the rain, that the men who draw the canoes can scarcely walk, and the earth and stone constantly falling down the high bluffs make it dangerous to pass under them; still however we are obliged to make use of the cord, as the wind is strong ahead, the current too rapid for oars; and too deep for the
pole. In this way we passed at the distance of five and a half miles a small rivulet in a bend on the north, two miles further an island on the same side, half a mile beyond which came to a grove of trees at the entrance of a run in a bend to the south, and 

**encamped**

for the night on the northern shore. The eight miles which we made to-day cost us much trouble. The air was cold and rendered more disagreeable by the rain, which fell in several slight showers in the course of the day; our cords too broke several times, but fortunately without injury to the boats. On ascending the hills near the river, one of the party found that there was snow mixed with the rain on the heights: a little back of these the country becomes perfectly level on both sides of the river. There is now no timber on the hills, and only a few scattering cottonwood, ash, box-alder, and willows, along the water. In the course of the day we passed several encampments of Indians, the most recent of which seemed to have been evacuated about five weeks since, and from the several apparent dates we supposed that they were made by a band of about one hundred lodges who were travelling slowly up the river. Although no part of the Missouri from the Minnetarees to this place exhibit signs of permanent settlements, yet none seem exempt from the transient visits of hunting parties. We know that the Minnetarees of the Missouri extend their excursions on the south side of the river, as high as the Yellowstone; and the Assiniboins visit the northern side, most probably as high as Porcupine river. All the lodges between that place and the Rocky mountains we supposed to belong to the Minnetarees of fort de Prairie, who live on the south fork of the Saskashawan.

Friday, 31. We proceeded in two periogues, leaving the onnoes to bring on the meat of two buffaloes killed last evening. Soon after we set off it began to rain, and though it ceased at noon, the weather continued cloudy during the rest of the day. The obstructions of yesterday still remain and fatigue the men excessively: the banks are so slippery
in some places and the mud so adhesive that they are unable to wear their moccasins; one fourth of the time they are obliged to be up to their armpits in the cold water, and sometimes walk for several yards over the sharp fragments of rocks which have fallen from the hills: all this added to the burden of dragging the heavy canoes is very painful, yet the men bear it with great patience and good humour. Once the rope of one of the periogues, the only one we had made of hemp, broke short, and the periogue swung and just touched a point of rock which almost overset her. At nine miles we came to a high wall of black rock rising from the water's edge on the south, above the cliffs of the river: this continued about a quarter of a mile, and was succeeded by a high open plain, till three miles further a second wall two hundred feet high rose on the same side. Three miles further a wall of the same kind about two hundred feet high and twelve in thickness, appeared to the north: these hills and river cliffs exhibit a most extraordinary and romantic appearance: they rise in most places nearly perpendicular from the water, to the height of between two and three hundred feet, and are formed of very white sandstone, so soft as to yield readily to the impression of water, in the upper part of which lie imbedded two or three thin horizontal stratas of white freestone insensible to the rain, and on the top is a dark rich loam, which forms a gradually ascending plain, from a mile to a mile and a half in extent, when the hills again rise abruptly to the height of about three hundred feet more. In trickling down the cliffs, the water has worn the soft sandstone into a thousand grotesque figures, among which with a little fancy may be discerned elegant ranges of freestone buildings, with columns variously sculptured, and supporting long and elegant galleries, while the parapets are adorned with statuary: on a nearer approach they represent every form of elegant ruins; columns, some with pedestals and capitals entire, others mutilated and prostrate, and some rising pyramidally over each
other till they terminate in a sharp point. These are varied by niches, alcoves, and the customary appearances of desolated magnificence: the allusion is increased by the number of martins, who have built their globular nests in the niches and hover over these columns; as in our country they are accustomed to frequent large stone structures. As we advance there seems no end to the visionary enchantment which surrounds us. In the midst of this fantastic scenery are vast ranges of walls, which seem the productions of art, so regular is the workmanship: they rise perpendicularly from the river, sometimes to the height of one hundred feet, varying in thickness from one to twelve feet, being equally broad at the top as below. The stones of which they are formed are black, thick, and durable, and composed of a large portion of earth, intermixed and cemented with a small quantity of sand, and a considerable proportion of talk or quartz. These stones are almost invariably regular parallelepipeds of unequal sizes in the wall, but equally deep, and laid regularly in ranges over each other like bricks, each breaking and covering the interstice of the two on which it rests; but though the perpendicular interstice be destroyed, the horizontal one extends entirely through the whole work: the stones too are proportioned to the thickness of the wall in which they are employed, being largest in the thickest walls. The thinner walls are composed of a single depth of the parallelepiped, while the thicker ones consist of two or more depths: these walls pass the river at several places, rising from the water's edge much above the sandstone bluffs which they seem to penetrate; thence they cross in a straight line on either side of the river, the plains over which they tower to the height of from ten to seventy feet, until they lose themselves in the second range of hills: sometimes they run parallel in several ranges near to each other, sometimes intersect each other at right angles, and have the appearance of walls of ancient houses or gardens.
The face of some of these river hills, is composed of very excellent freestone of a light yellowish brown colour, and among the cliffs we found a species of pine which we had not yet seen, and differing from the Virginia pitchpine in having a shorter leaf, and a longer and more pointed cone. The coal appears only in small quantities, as do the burnt earth and pumicestone: the mineral salts have abated. Among the animals are a great number of the highhorn, a few buffaloe and elk, and some mule-deer, but none of the common deer nor any antelopes. We saw but could not procure a beautiful fox, of a colour varied with orange, yellow, white, and black, rather smaller than the common fox of this country, and about the same size as the red fox of the United States.

The river to-day has been from about one hundred and fifty to two hundred and fifty yards wide, with but little timber. At the distance of two miles and a half from the last stone wall, is a stream on the north side, twenty-eight yards in width, and with some running water. We encamped just above its mouth having made eighteen miles.

Saturday, June 1. The weather was cloudy with a few drops of rain. As we proceeded by the aid of our cord we found the river cliffs and bluffs not so high as yesterday, and the country more level. The timber too is in greater abundance on the river, though there is no wood on the high ground; coal however appears in the bluffs. The river is from two hundred to two hundred and fifty feet wide, the current more gentle, the water becoming still clearer and fewer rocky points and shoals than we met yesterday, though those which we did encounter were equally difficult to pass. Game is by no means in such plenty as below; all that we obtained were one bighorn, and a mule-deer though we saw in the plains a quantity of buffaloe, particularly near a small lake about eight miles from the river to the south. Notwithstanding the wind was ahead all day, we dragged the canoes along the distance of twenty-three miles. At fourteen
and a quarter miles, we came to a small island opposite a
bend of the river to the north: two and a half miles to
the upper point of a small island on the north; five miles to
another island on the south side and opposite to a bluff. In
the next two miles we passed an island on the south, a se-
cond beyond it on the north, and reached near a high bluff
on the north a third on which we encamped. In the plains
near the river are the chokecherry, yellow and red currant-
bushes, as well as the wild rose and prickly pear, both of
which are now in bloom. From the tops of the river hills,
which are lower than usual, we enjoyed a delightful view
of the rich fertile plains on both sides, in many places
extending from the river cliffs to a great distance back. In
these plains we meet occasionally large banks of pure sand,
which were driven apparently by the southwest winds, and
there deposited. The plains are more fertile some dis-
tance from the river than near its banks, where the surface
of the earth is very generally strewed with small pebbles,
which appear to be smoothed and worn by the agitation of
the waters with which they were no doubt once covered.

A mountain or part of the North mountain approaches the
river within eight or ten miles, bearing north from our en-
campment of last evening; and this morning a range of high
mountains bearing S. W. from us and apparently running to
the westward, are seen at a great distance covered with
snow. In the evening we had a little more rain.

Sunday 2. The wind blew violently last night, and a slight
shower of rain fell, but this morning was fair. We set out at
an early hour, and although the wind was ahead by means
of the cord went on much better than for the last two days,
as the banks were well calculated for towing. The current
of the river is strong but regular, its timber increases in
quantity, the low grounds become more level and extensive,
and the bluffs on the river are lower than usual. In the
course of the day we had a small shower of rain, which last-
ed a few minutes only. As the game is very abundant we think it necessary to begin a collection of hides for the purpose of making a leathern boat, which we intend constructing shortly. The hunters who were out the greater part of the day brought in six elk, two buffaloe, two mule-deer and a bear. This last animal had nearly cost us the lives of two of our hunters who were together when he attacked them; one of them narrowly escaped being caught, and the other after running a considerable distance, concealed himself in some thick bushes, and while the bear was in quick pursuit of his hiding place, his companion came up and fortunately shot the animal through the head.

At six and a half miles we reached an island on the northern side; one mile and a quarter thence is a timbered low ground on the south: and in the next two and three quarter miles we passed three small islands, and came to a dark bluff on the south: within the following mile are two small islands on the same side. At three and a quarter miles we reached the lower part of a much larger island near a northern point, and as we coasted along its side, within two miles passed a smaller island, and half a mile above reached the head of another. All these islands are small, and most of them contain some timber. Three quarters of a mile beyond the last, and at the distance of eighteen miles from our encampment, we came to for the night in a handsome low cottonwood plain on the south, where we remained for the purpose of making some celestial observations during the night, and of examining in the morning a large river which comes in opposite to us. Accordingly at an early hour,

Monday, 3d, we crossed and fixed our camp in the point, formed by the junction of the river with the Missouri. It now became an interesting question which of these two streams is what the Minnetarees call Ahmateahza or the Missouri, which they described as approaching very near to the Columbia. On our right decision much of the fate of the expedition depends; since if after ascending to the Rocky
mountains or beyond them, we should find that the river we were following did not come near the Columbia and be obliged to return; we should not only lose the travelling season, two months of which had already elapsed, but probably dishearten the men so much as to induce them either to abandon the enterprise, or yield us a cold obedience instead of the warm and zealous support which they had hitherto afforded us. We determined, therefore, to examine well before we decided on our future course; and for this purpose despatched two canoes with three men up each of the streams with orders to ascertain the width, depth, and rapidity of the current, so as to judge of their comparative bodies of water. At the same time parties were sent out by land to penetrate the country, and discover from the rising grounds, if possible, the distant bearings of the two rivers; and all were directed to return towards evening. While they were gone we ascended together the high grounds in the fork of these two rivers, whence we had a very extensive prospect of the surrounding country: on every side it was spread into one vast plain covered with verdure, in which innumerable herds of buffaloe were roaming, attended by their enemies the wolves: some flocks of elk also were seen, and the solitary antelopes were scattered with their young over the face of the plain. To the south was a range of lofty mountains, which we supposed to be a continuation of the South mountain, stretching themselves from southeast to northwest, and terminating abruptly about southwest from us. These were partially covered with snow; but at a great distance behind them was a more lofty ridge completely covered with snow, which seemed to follow the same direction as the first, reaching from west to the north of northwest, where their snowy tops were blended with the horizon. The direction of the rivers could not however be long distinguished, as they were soon lost in the extent of the plain. On our return we continued our examination; the width of the north branch is
two hundred yards, that of the south is three hundred and seventy-two. [The north, although narrower and with a gentler current, is deeper than the south: its waters too are of the same whitish brown colour, thickness, and turbidity: they run in the same boiling and rolling manner which has uniformly characterized the Missouri; and its bed is composed of some gravel, but principally mud. The south fork is deeper, but its waters are perfectly transparent: its current is rapid, but the surface smooth and unruffled; and its bed too is composed of round and flat smooth stones like those of rivers issuing from a mountainous country. The air and character of the north fork so much resemble those of the Missouri that almost all the party believe that to be the true course to be pursued. We however, although we have given no decided opinion, are inclined to think otherwise, because, although this branch does give the colour and character to the Missouri, yet these very circumstances induce an opinion that it rises in and runs through an open plain country, since if it came from the mountains it would be clearer, unless, which from the position of the country is improbable, it passed through a vast extent of low ground after leaving them: we thought it probable that it did not even penetrate the Rocky mountains, but drew it sources from the open country towards the lower and middle parts of the Saskashawan, in a direction north of this place. What embarrasses us most is, that the Indians who appeared to be well acquainted with the geography of the country, have not mentioned this northern river; for "the river which scolds at all others," as it is termed, must be according to their account one of the rivers which we have passed; and if this north fork be the Missouri, why have they not designated the south branch which they must also have passed, in order to reach the great falls which they mention on the Missouri. In the evening our parties returned, after ascending the rivers in canoes for some distance, then continuing on foot, just leaving themselves time to return by
Up the Missouri.

might. The **north fork** was less rapid, and therefore afforded the easiest navigation: the shallowest water of the north was five feet deep, that of the south six feet. At two and a half miles up the north fork is a **small river coming in on the left or western side**, sixty feet wide, with a bold current three feet in depth. The party by land had gone up the south fork in a straight line, somewhat north of west for seven miles, where they discovered that this little river came within one hundred yards of the south fork, and on returning down it found it a handsome stream, with as much timber as either of the larger rivers, consisting of the narrow and wide-leafed cottonwood, some birch and box-alder, and undergrowth of willows, rosebushes, and currants: they also saw on this river a great number of elk and some beaver.

All these accounts were however very far from deciding the important question of our future route, and we therefore determined each of us to ascend one of the rivers during a day and a half's march, or farther if necessary, for our satisfaction. Our hunters killed two buffaloe, six elk, and four deer to-day. Along the plains near the junction, are to be found the prickly pear in great quantities; the choke-cherry is also very abundant in the river low grounds, as well as the ravines along the river bluffs; the yellow and red currants are not yet ripe; the gooseberry is beginning to ripen, and the wildrose which now covers all the low grounds near the rivers is in full bloom. The fatigues of the last few days have occasioned some falling off in the appearance of the men, who not having been able to wear moccasins, had their feet much bruised and mangled in passing over the stones and rough ground. They are however perfectly cheerful, and have an undiminished ardour for the expedition.

Tuesday, June 4. At the same hour this morning captain Lewis and captain Clarke set out to explore the two rivers; captain Lewis with six men crossed the north fork
near the camp, below a small island from which he took a course N. 30° W. for four and a half miles to a commanding eminence. Here we observed that the North mountain, changing its direction parallel to the Missouri, turned towards the north and terminated abruptly at the distance of about thirty miles, the point of termination bearing N. 48° E. The South mountain too diverges to the south, and terminates abruptly, its extremity bearing S. 8° W. distant about twenty miles: to the right of, and retreating from this extremity, is a separate mountain at the distance of thirty-five miles in a direction S. 38° W. which from its resemblance to the roof of a barn, we called the Barn mountain. The north fork, which is now on the left, makes a considerable bend to the northwest, and on its western border a range of hills about ten miles long, and bearing from this spot N. 60° W. runs parallel with it: north of this range of hills is an elevated point of the river bluff on its south side, bearing N. 72° W. about twelve miles from us; towards this he directed his course across a high, level, dry open plain; which in fact embraces the whole country to the foot of the mountains. The soil is dark, rich, and fertile, yet the grass by no means so luxuriant as might have been expected, for it is short and scarcely more than sufficient to cover the ground. There are vast quantities of prickly pears, and myriads of grasshoppers, which afford food for a species of curlew which is in great numbers in the plain. He then proceeded up the river to the point of observation they had fixed on; from which he went two miles N. 15° W. to a bluff point on the north side of the river: thence his course was N. 30° W. for two miles to the entrance of a large creek on the south. The part of the river along which he passed is from forty to sixty yards wide, the current strong, the water deep and turbid, the banks falling in, the salts, coal and mineral appearances are as usual, and in every respect, except as to size, this river resembles the Missouri. The low grounds are narrow but well supplied with wood: the bluffs are prin-
cipally of dark brown yellow, and some white clay with freestone in some places. From this point, the river bore N. 20° E. to a bluff on the south, at the distance of twelve miles: towards this he directed his course, ascending the hills which are about two hundred feet high, and passing through plains for three miles, till he found the dry ravines so steep and numerous that he resolved to return to the river and follow its banks. He reached it about four miles from the beginning of his course, and encamped on the north in a bend among some bushes which sheltered the party from the wind: the air was very cold, the northwest wind high, and the rain wet them to the skin. Besides the game just mentioned, he observed buffaloe, elk, wolves, foxes, and we got a blaireau and a weasel, and wounded a large brown bear, whom it was too late to pursue. Along the river are immense quantities of roses which are now in full bloom, and which make the low grounds a perfect garden.

Wednesday 5. The rain fell during the greater part of the last night, and in the morning the weather was cloudy and cold, with a high northwest wind: at sunrise he proceeded up the river eight miles to the bluff on the left side, towards which he had been directing his course yesterday. Here he found the bed of a creek twenty-five yards wide at the entrance, with some timber, but no water, notwithstanding the rain: it is, indeed, astonishing to observe the vast quantities of water absorbed by the soil of the plains, which being opened in large crevices presents a fine rich loam: at the month of this stream (which he called Lark creek) the bluffs are very steep and approach the river so that he ascended them, and crossing the plains reached the river, which from the last point bore N. 50° W: four miles from this place it extended north two miles. Here he discovered a lofty mountain standing alone at the distance of more than eighty miles in the direction of N. 30° W. and which from its conical figure he called Tower mountain.
He then proceeded on these two hills and afterwards in different courses six miles, when he again changed for a western course across a deep bend along the south side; in making this passage over the plains he found them like those of yesterday, level and beautiful, with great quantities of buffaloe, and some wolves, foxes, and antelopes, and intersected near the river by deep ravines. Here at the distance of from one to nine miles from the river, he met the largest village of barking squirrels which we had yet seen: for he passed a skirt of their territory for seven miles. He also saw near the hills a flock of the mountain cock or a large species of health hen with a long pointed tail, which the Indians below had informed us were common among the Rock mountains. Having finished his course of ten miles west across a bend, he continued two miles N. 80° W. and from that point discovered some lofty mountains to the northwest of Tower mountain and bearing N. 65° W. at eighty or one hundred miles distance: here he encamped on the north side in a handsome low ground, on which were several old stick lodges: there had been but little timber on the river in the forepart of the day, but now there is a greater quantity than usual. The river itself is about eighty yards wide, from six to ten feet deep, and has a strong steady current. The party had killed five elk, and a mule-deer; and by way of experiment roasted the burrowing squirrels, which they found to be well flavoured and tender.

Thursday 6. Captain Lewis was now convinced that this river pursued a direction too far north for our route to the Pacific, and therefore resolved to return; but waited till noon to take a meridian altitude. The clouds, however, which had gathered during the latter part of the night continued and prevented the observation: part of the men were sent forward to a commanding eminence, six miles S. 70° W; from which they saw at the distance of about fifteen miles. S. 80° W. a point of the south bluff of the river, which thence bore northwardly. In their absence two rafts had
been prepared, and when they returned about noon, the party embarked: but they soon found that the rafts were so small and slender that the baggage was wet, and therefore it was necessary to abandon them, and go by land. They therefore crossed the plains, and at the distance of twelve miles came to the river, through a cold storm from the northeast, accompanied by showers of rain. The abruptness of the cliffs compelled them, after going a few miles, to leave the river and meet the storm in the plains. Here they directed their course too far northward, in consequence of which they did not meet the river till late at night, after having travelled twenty-three miles since noon, and halted at a little below the entrance of Lark creek. They had the good fortune to kill two buffaloe which supplied them with supper: but spent a very uncomfortable night without any shelter from the rain, which continued till morning.

Friday 7, when at an early hour they continued down the river. The route was extremely unpleasant, as the wind was high from the N. E. accompanied with rain, which made the ground so slippery that they were unable to walk over the bluffs which they had passed on ascending the river. The land is the most thirsty we have ever seen; notwithstanding all the rain which has fallen, the earth is not wet for more than two inches deep, and resembles thawed ground; but if it requires more water to saturate it than the common soils, on the other hand it yields its moisture with equal difficulty. In passing along the side of one of these bluffs at a narrow pass thirty yards in length, captain Lewis slipped, and but for a fortunate recovery, by means of his espontoon, would have been precipitated into the river over a precipice of about ninety feet. He had just reached a spot where by the assistance of his espontoon he could stand with tolerable safety, when he heard a voice behind him cry out, good God captain what shall I do? he turned instantly and found it was Windsor who had lost his foothold about the middle
of the narrow pass, and had slipped down to the very verge of the precipice where he lay on his belly, with his right arm and leg over the precipice, while with the other leg and arm he was with difficulty holding on to keep himself from being dashed to pieces below. His dreadful situation was instantly perceived by captain Lewis, who stifling his alarm, calmly told him that he was in no danger; that he should take his knife out of his belt with the right hand, and dig a hole in the side of the bluff to receive his right foot. With great presence of mind he did this, and then raised himself on his knees; captain Lewis then told him to take off his moccasins and come forward on his hands and knees, holding the knife in one hand and his rifle in the other. He immediately crawled in this way till he came to a secure spot. The men who had not attempted this passage, were ordered to return and wade the river at the foot of the bluff, where they found the water breast high. This adventure taught them the danger of crossing the slippery heights of the river; but as the plains were intersected by deep ravines almost as difficult to pass, they continued down the river, sometimes in the mud of the low grounds, sometimes up to their arms in the water, and when it became too deep to wade, they cut footholds with their knives in the sides of the banks. In this way they travelled through the rain, mud, and water, and having made only eighteen miles during the whole day, encamped in an old Indian lodge of sticks, which afforded them a dry shelter. Here they cooked part of six deer they had killed in the course of their walk, and having eaten the only morsel they had tasted during the whole day slept comfortably on some willow boughs.
CHAPTER X.

Return of captain Lewis—Account of captain Clarke's researches with his exploring party—Perilous situation of one of his party—Tansy river described—The party still believing the southern fork the Missouri, captain Lewis resolves to ascend it—Mode of making a place to deposit provisions, called cache—Captain Lewis explores the southern fork—Falls of the Missouri discovered, which ascertains the question—Romantic scenery of the surrounding country—Narrow escape of captain Lewis—The main body under captain Clarke approach within five miles of the falls, and prepare for making a portage over the rapids.

Saturday 8. IT continued to rain moderately all last night, and the morning was cloudy till about ten o'clock, when it cleared off, and became a fine day. They breakfasted about sunrise and then proceeded down the river in the same way as they had done yesterday, except that the travelling was somewhat better, as they had not so often to wade, though they passed some very dangerous bluffs. The only timber to be found is in the low grounds which are occasionally on the river, and these are the haunts of innumerable birds, who, when the sun began to shine, sang very delightfully. Among these birds they distinguished the brown thrush, robin turtledove, linnet, goldfinch, the large and small blackbird, the wren, and some others. As they came along, the whole of the party were of opinion that this river was the true Missouri; but captain Lewis being fully persuaded that it was neither the main stream, nor that which it would be advisable to ascend, gave it the name of Maria's river. After travelling all day they reached the camp at five o'clock in the afternoon, and found captain Clarke and the party very anxious for their safety, as they had staid two days longer than had been expected, and as captain Clarke had returned at the appointed time, it was feared that they had met with some accident.
Captain Clarke on setting out with five men on the 4th, went seven miles on a course S. 25º W. to a spring; thence he went S. 20º W. for eight miles to the river where was an island, from which he proceeded in a course N. 45º W. and approached the river at the distance of three, five, and thirteen miles, at which place they encamped in an old Indian lodge made of sticks and bark. In crossing the plains they observed several herds of buffaloe, some muledeer, antelopes and wolves. The river is rapid and closely hemmed in by high bluffs, crowded with bars of gravel, with little timber on the low grounds, and none on the highlands. Near the camp this evening, a white bear attacked one of the men, whose gun happening to be wet, would not go off; he instantly made towards a tree, but was so closely pursued, that as he ascended the tree he struck the bear with his foot. The bear not being able to climb, waited till he should be forced to come down; and as the rest of the party were separated from him by a perpendicular cliff of rocks, which they could not descend, it was not in their power to give him any assistance: fortunately however at last the bear became frightened at their cries and firing, and released the man. In the afternoon it rained, and during the night there fell both rain and snow, and in the morning,

June 5, the hills to the S. E. were covered with snow, and the rain continued. They proceeded on in a course N. 203 W. near the river several miles, till at the distance of eleven miles they reached a ridge, from the top of which on the north side they could plainly discern a mountain to the S. and W. at a great distance covered with snow; a high ridge projecting from the mountains to the southeast approaches the river on the southeast side, forming some cliffs of dark hard stone. They also saw that the river ran for a great distance west of south, with a rapid current, from which as well as its continuing of the same width and depth, captain Clarke thought it useless to advance any further, and there-
fore returned across the level plain in a direction north 30º east, and reached at the distance of twenty miles the little river which is already mentioned as falling into the north fork, and to which they gave the name of Tansy river, from the great quantity of that herb growing on its banks. Here they dined, and then proceeded on a few miles by a place where the Tansy breaks through a high ridge on its north side and encamped.

The next day, 6th, the weather was cold, raw and cloudy, with a high northeast wind. They set out early, down the Tansy, whose low grounds resemble precisely, except as to extent, those of the Missouri before it branches, containing a great proportion of a species of cottonwood, with a leaf like that of the wild cherry. After halting at twelve o'clock for dinner, they ascended the plain, and at five o'clock reached the camp through the rain, which had fallen without intermission since noon. During his absence the party had been occupied in dressing skins, and being able to rest themselves were nearly freed from their lameness and swollen feet. All this night and the whole of the following day, 7th, it rained, the wind being from the southwest off the mountains: yet the rivers are falling, and the thermometer 40º above 0. The rain continued till the next day, 8th, at ten o'clock, when it cleared off, and the weather became fine, the wind high from the southwest. The rivers at the point have now fallen six inches since our arrival, and this morning the water of the south fork became of a reddish brown colour, while the north branch continued of its usual whitish appearance. The mountains to the south are covered with snow.

Sunday, 9th. We now consulted upon the course to be pursued. On comparing our observations we were more than ever convinced of what we already suspected, that Mr. Arrowsmith is incorrect in laying down in the chain of Rocky mountains one remarkable mountain called the Tooth, nearly as far south as 45º, and said to be so marked from
the discoveries of a Mr. Fidler. We are now within one hundred miles of the Rocky mountains and in the latitude of 47º 24' 12" N, and therefore it is highly improbable that the Missouri should make such a bend to the south before it reaches the Rocky mountains, as to have suffered Mr. Fidler to come as low as 45º along the eastern borders without touching that river: yet the general course of Maria's river from this place for fifty-nine miles, as far as captain Lewis ascended, was north 69º west, and the south branch, or what we consider the Missouri, which captain Clarke had examined as far as forty-five miles in a straight line, ran in a course south 29º west, and as far as it could be seen went considerably west of south, whence we conclude that the Missouri itself enters the Rocky mountains to the north of 45º. In writing to the president from our winter quarters, we had already taken the liberty of advancing the southern extremity of Mr. Fidler's discoveries about a degree to the northward, and this from Indian information as to the bearing of the point at which the Missouri enters the mountain; but we think actual observation will place it one degree still further to the northward. This information of Mr. Fidler however, incorrect as it is, affords an additional reason for not pursuing Maria's river; for if he came as low even as 47º and saw only small streams coming down from the mountains, it is to be presumed that these rivulets do not penetrate the Rocky mountains so far as to approach any navigable branch of the Columbia, and they are most probably the remote waters of some northern branch of the Missouri. In short, being already in latitude 47º 24' we cannot reasonably hope by going farther to the northward to find between this place and the Saskashawan any stream which can, as the Indians assure us the Missouri does, possess a navigable current for some distance in the Rocky mountains: the Indians had assured us also that the water of the Missouri was nearly transparent at the falls; this is the case with the southern branch; that the falls lay a little to the
south of sunset from them; this too is in favour of the southern fork, for it bears considerably south of this place which is only a few minutes to the northward of fort Mandan; that the falls are below the Rocky mountains and near the northern termination of one range of those mountains: now there is a ridge of mountains which appear behind the South mountains and terminates to the southwest of us, at a sufficient distance from the unbroken chain of the Rocky mountains to allow space for several falls, indeed we fear for too many of them. If too the Indians had ever passed any stream as large as this southern fork on their way up the Missouri, they would have mentioned it; so that their silence seems to prove that this branch must be the Missouri. The body of water also which it discharges must have been acquired from a considerable distance in the mountains, for it could not have been collected in the parched plains between the Yellowstone and the Rocky mountains, since that country could not supply nourishment for the dry channels which we passed on the south, and the travels of Mr. Fidler forbid us to believe that it could have been obtained from the mountains towards the northwest.

These observations which satisfied our minds completely we communicated to the party: but every one of them were of a contrary opinion; and much of their belief depended on Crusatte, an experienced waterman on the Missouri, who gave it as his decided judgment that the north fork was the genuine Missouri. The men therefore mentioned that although they would most cheerfully follow us wherever we should direct, yet they were afraid that the south fork would soon terminate in the Rocky mountains and leave us at a great distance from the Columbia. In order that nothing might be omitted which could prevent our falling into an error, it was agreed that one of us should ascend the southern branch by land until we reached either the falls or the mountains. In the meantime in order to lighten
our burdens as much as possible, we determined to deposit here one of the periogues and all the heavy baggage which we could possibly spare, as well as some provision, salt, powder, and tools: this would at once lighten the other boats, and give them the crew which had been employed on board the periogue.

Monday, 10. The weather being fair and pleasant we dried all our baggage and merchandize and made our deposit. These holes or *caches* as they are called by the Missouri traders are very common, particularly among those who deal with the Sioux, as the skins and merchandize will keep perfectly sound for years, and are protected from robbery: our cache is built in this manner: In the high plain on the north side of the Missouri and forty yards from a steep bluff, we chose a dry situation, and then describing a small circle of about twenty inches diameter, removed the sod as gently and carefully as possible: the hole is then sunk perpendicularly for a foot deep, or more if the ground be not firm. It is now worked gradually wider as they descend, till at length it becomes six or seven feet deep, shaped nearly like a kettle or the lower part of a large still with the bottom somewhat sunk at the centre. As the earth is dug it is handed up in a vessel and carefully laid on a skin or cloth, in which it is carried away and usually thrown into the river or concealed so as to leave no trace of it. A floor of three or four inches in thickness is then made of dry sticks, on which is thrown hay or a hide perfectly dry. The goods being well aired and dried are laid on this floor, and prevented from touching the wall by other dried sticks in proportion as the merchandize is stowed away: when the hole is nearly full, a skin is laid over the goods, and on this earth is thrown and beaten down until with the addition of the sod first removed the whole is on a level with the ground, and there remains not the slightest appearance of an excavation. In addition to this we made another of smaller dimensions,
in which we placed all the baggage, some powder, and our blacksmith's tools, having previously repaired such of the tools we carry with us as require mending. To guard against accident, we hid two parcels of lead and powder in the two distinct places. The red periogue was drawn up on the middle of a small island at the entrance of Maria's river, and secured by being fastened to the trees from the effect of any floods. In the evening there was a high wind from the southwest accompanied with thunder and rain. We now made another observation of the meridian altitude of the sun, and found that the mean latitude of the entrance of Maria's river, as deduced from three observations, is 47º 25' 17" 2 north. We saw a small bird like the blue thrush or catbird which we had not before met, and also observed that the beemartin or kingbird is common to this country although there are no bees here, and in fact we have not met with the honey-bee since leaving the Osage river.

Tuesday 11. This morning captain Lewis with four men set out on their expedition up the south branch. They soon reached the point where the Tansy river approaches the Missouri, and observing a large herd of elk before them, descended and killed several which they hung up along the river so that the party in the boats might see them as they came along. They then halted for dinner; but captain Lewis who had been for some days afflicted with the dysentery, was now attacked with violent pains attended by a high fever and was unable to go on. He therefore encamped for the night under some willow boughs: having brought no medicine he determined to try an experiment with the small twigs of the chokecherry, which being stripped of their leaves and cut into pieces about two inches long were boiled in pure water, till they produced a strong black decoction of an astringent bitter taste; a pint of this he took at sunset, and repeated the dose an hour afterwards. By ten o'clock he was perfectly relieved from pain, a gentle
perspiration ensued, his fever abated and in the morning he was quite recovered. One of the men caught several dozen fish of two species: the first is about nine inches long, of a white colour, round in shape; the mouth is beset both above and below with a rim of fine sharp teeth, the eye moderately large, the pupil dark, and the iris narrow, and of a yellowish brown colour: in form and size it resembles the white chub of the Potomac, though its head is proportionably smaller; they readily bite at meat or grasshoppers; but the flesh though soft and of a fine white colour is not highly flavoured. The second species is precisely of the form and about the size of the fish known by the name of the hickory shad or old wife, though it differs from it in having the outer edge of both the upper and lower jaw set with a rim of teeth, and the tongue and palate also are defended by long sharp teeth bending inwards, the eye is very large, the iris wide and of a silvery colour; they do not inhabit muddy water, and the flavour is much superior to that of the former species. Of the first kind we had seen a few before we reached Maria's river; but had found none of the last before we caught them in the Missouri above its junction with that river. The white cat continues as high as Maria's river, but they are scarce in this part of the river, nor have we caught any of them since leaving the Mandans which weighed more than six pounds.

Of other game they saw a great abundance even in their short march of nine miles.

Wednesday 12. This morning captain Lewis left the bank of the river in order to avoid the steep ravines which generally run from the shore to the distance of one or two miles in the plain: having reached the opened country he went for twelve miles in a course a little to the west of southwest, when the sun becoming warm by nine o'clock, he returned to the river in quest of water and to kill something for breakfast, there being no water in the plain, and the buffaloe discovering them before they came within gunshot took
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to flight. They reached the banks in a handsome open low ground with cottonwood, after three miles walk. Here they saw two large brown bears, and killed them both at the first fire, a circumstance which has never before occurred since we have seen that animal. Having made a meal of a part and hung the remainder on a tree with a note for captain Clarke, they again ascended the bluffs into the open plains. Here they saw great numbers of the burrowing squirrel, also some wolves, antelopes, muledeer, and vast herds of buffaloe. They soon crossed a ridge considerably higher than the surrounding plains, and from its top had a beautiful view of the Rocky mountains, which are now completely covered with snow: their general course is from southeast to the north of northwest, and they seem to consist of several ranges which successively rise above each other till the most distant mingles with the clouds. After travelling twelve miles they again met the river, where there was a handsome plain of cottonwood; and although it was not sunset, and they had only come twenty-seven miles, yet captain Lewis felt weak from his late disorder, and therefore determined to [go no further] that night. In the course of the day they killed a quantity of game, and saw some signs of otter as well as beaver, and many tracks of the brown bear: they also caught great quantities of the white fish mentioned yesterday. With the broad-leafed cottonwood, which has formed the principal timber of the Missouri, is here mixed another species differing from the first only in the narrowness of its leaf and the greater thickness of its bark. The leaf is long, oval, acutely pointed, about two and a half or three inches long and from three quarters of an inch to an inch in width; it is smooth and thick sometimes slightly grooved or channeled with the margin a little serrate, the upper disk of a common, the lower of a whitish green. This species seems to be preferred by the beaver to the broad-leaved, probably because the former affords a deeper and softer bark.
Thursday 13. They left their encampment at sunrise, and ascending the river hills went for six miles in a course generally southwest, over a country which though more waving than that of yesterday may still be considered level. At the extremity of this course they overlooked a most beautiful plain, where were infinitely more buffaloe than we had ever before seen at a single view. To the southwest arose from the plain two mountains of a singular appearance and more like ramparts of high fortifications than works of nature. They are square figures with sides rising perpendicularly to the height of two hundred and fifty feet, formed of yellow clay, and the tops seemed to be level plains. Finding that the river here bore considerably to the south, and fearful of passing the falls before reaching the Rocky mountains, they now changed their course to the south, and leaving those insulated hills to the right proceeded across the plain. In this direction captain Lewis had gone about two miles when his ears were saluted with the agreeable sound of a fall of water, and as he advanced a spray which seemed driven by the high southwest wind arose above the plain like a column of smoke and vanished in an instant. Towards this point he directed his steps, and the noise increasing as he approached soon became too tremendous to be mistaken for any thing but the great falls of the Missouri. Having travelled seven miles after first hearing the sound he reached the falls about twelve o’clock, the hills as he approached were difficult of access and two hundred feet high: down these he hurried with impatience and seating himself on some rocks under the centre of the falls, enjoyed the sublime spectacle of this stupendous object which since the creation had been lavishing its magnificence upon the desert, unknown to civilization.

The river immediately at its cascade is three hundred yards wide, and is pressed in by a perpendicular cliff on the left, which rises to about one hundred feet and extends up the stream for a mile; on the right the bluff is also perpendi-
[MAP PAGE]
cular for three hundred yards above the falls. For ninety or a hundred yards from the left cliff, the water falls in one smooth even sheet, over a precipice of at least eighty feet. The remaining part of the river precipitates itself with a more rapid current, but being received as it falls by the irregular and somewhat projecting rocks below, forms a splendid prospect of perfectly white foam two hundred yards in length, and eighty in perpendicular elevation. This spray is dissipated into a thousand shapes, sometimes flying up in columns of fifteen or twenty feet, which are then oppressed by larger masses of the white foam, on all which the sun impresses the brightest colours of the rainbow. As it rises from the fall it beats with fury against a ledge of rocks which extend across the river at one hundred and fifty yards from the precipice. From the perpendicular cliff on the north, to the distance of one hundred and twenty yards, the rocks rise only a few feet above the water, and when the river is high the stream finds a channel across them forty yards wide, and near the higher parts of the ledge which then rise about twenty feet, and terminate abruptly within eighty or ninety yards of the southern side. Between them and the perpendicular cliff on the south, the whole body of water runs with great swiftness. A few small cedars grow near this ridge of rocks which serves as a barrier to defend a small plain of about three acres shaded with cottonwood, at the lower extremity of which is a grove of the same tree, where are several Indian cabins of sticks; below the point of them the river is divided by a large rock, several feet above the surface of the water, and extending down the stream for twenty yards. At the distance of three hundred yards from the same ridge is a second abutment of solid perpendicular rock about sixty feet high, projecting at right angles from the small plain on the north for one hundred and thirty-four yards into the river. After leaving this, the Missouri again spreads itself to its usual distance of three hundred yards, though with more than its ordinary rapidity.
The hunters who had been sent out now returned loaded with buffaloe meat, and captain Lewis **encamped** for the night under a tree near the falls. The men were again de-spatched to hunt for food against the arrival of the party, and captain Lewis walked down the river to discover if possible some place where the canoes might be safely drawn on shore, in order to be transported beyond the falls. He returned however without discovering any such spot, the river for three miles below being one continued succession of rapids and cascades, overhung with perpendicular bluffs from one hundred and fifty to two hundred feet high; in short, it seems to have worn itself a channel through the solid rock. In the afternoon they caught in the falls some of both kinds of the white fish, and half a dozen trout from sixteen to twenty-three inches long, precisely resembling in form and the position of its fins the mountain or speckled trout of the United States, except that the specks of the former are of a deep black, while those of the latter are of a red or gold colour: they have long sharp teeth on the palate and tongue, and generally a small speck on each side behind the front ventral fins; the flesh is of a pale yellowish red, or when in good order of a rose-coloured red.

Friday 14. This morning one of the men was sent to captain Clarke with an account of the discovery of the falls, and after employing the rest in preserving the meat which had been killed yesterday, captain Lewis proceeded to examine the rapids above. From the falls he directed his course southwest up the river: after passing one continued rapid, and three small cascades, each three or four feet high, he reached at the distance of five miles a second fall. The river is about four hundred yards wide, and for the distance of three hundred throws itself over to the depth of nineteen feet, and so irregularly that he gave it the name of the **Crooked falls**. From the southern shore it extends obliquely upwards about one hundred and fifty yards, and then forms an acute angle downwards nearly to the commence-
ment of four small islands close to the northern side. From the perpendicular pitch to these islands, a distance of more than one hundred yards, the water glides down a sloping rock with a velocity almost equal to that of its fall. Above this fall the river bends suddenly to the northward: while viewing this place captain Lewis heard a loud roar above him, and crossing the point of a hill for a few hundred yards, he saw one of the most beautiful objects in nature: the whole Missouri is suddenly stopped by one shelving rock, which without a single niche and with an edge as straight and regular as if formed by art, stretches itself from one side of the river to the other for at least a quarter of a mile. Over this it precipitates itself in an even uninterrupted sheet to the perpendicular depth of fifty feet, whence dash-ing against the rocky bottom it rushes rapidly down, lea-ving behind it a spray of the purest foam across the river. The scene which it presented was indeed singularly beau-tiful, since without any of the wild irregular sublimity of the lower falls, it combined all the regular elegances which the fancy of a painter would select to form a beautiful waterfall. The eye had scarcely been regaled with this charming prospect, when at the distance of half a mile captain Lewis observed another of a similar kind: to this he immediately hastened, and found a cascade stretching across the whole river for a quarter of a mile with a de-scent of fourteen feet, though the perpendicular pitch was only six feet. This too in any other neighbourhood would have been an object of great magnificence, but after what he had just seen it became of secondary interest: his curi-osity being however awakened, he determined to go on even should night overtake him to the head of the falls. He therefore pursued the southwest course of the river, which was one constant succession of rapids and small cascades, at every one of which the bluffs grew lower, or the bed of the river became more on a level with the plains. At the dis-tance of two and a half miles he arrived at another cata-
ract of twenty-six feet. The river is here six hundred yards wide, but the descent is not immediately perpendicular; though the river falls generally with a regular and smooth sheet; for about one third of the descent a rock protrudes to a small distance, receives the water in its passage and gives it a curve. On the south side is a beautiful plain a few feet above the level of the falls; on the north the country is more broken, and there is a hill not far from the river. Just below the falls is a little island in the middle of the river well covered with timber. Here on a cottonwood tree an eagle had fixed its nest, and seemed the undisputed mistress of a spot, to contest whose dominion neither man nor beast would venture across the gulfs that surround it, and which is further secured by the mist rising from the falls. This solitary bird could not escape the observation of the Indians who made the eagle's nest a part of their description of the falls, which now proves to be correct in almost every particular, except that they did not do justice to their height. Just above this is a cascade of about five feet, beyond which, as far as could be discerned, the velocity of the water seemed to abate. Captain Lewis now ascended the hill which was behind him, and saw from its top a delightful plain extending from the river to the base of the Snow mountains to the south and southwest. Along this wide level country the Missouri pursued its winding course, filled with water to its even and grassy banks, while about four miles above it was joined by a large river flowing from the northwest through a valley three miles in width, and distinguished by the timber which adorned its shores; the Missouri itself stretches to the south in one unruffled stream of water as if unconscious of the roughness it must soon encounter, and bearing on its bosom vast flocks of geese, while numerous herds of buffaloe are feeding on the plains which surround it.

Captain Lewis then descended the hill, and directed his course towards the river falling in from the west. He soon
met a herd of at least a thousand buffaloe, and being desirous of providing for supper shot one of them; the animal immediately began to bleed, and captain Lewis who had forgotten to reload his rifle, was intently watching to see him fall, when he beheld a large brown bear who was stealing on him unperceived, and was already within twenty steps. In the first moment of surprise he lifted his rifle, but remembering instantly that it was not charged, and that he had not time to reload, he felt that there was no safety but in flight. It was in the open level plain, not a bush nor a tree within three hundred yards, the bank of the river sloping and not more than three feet high, so that there was no possible mode of concealment; captain Lewis therefore thought of retreating in a quick walk as fast as the bear advanced towards the nearest tree; but as soon as he turned the bear ran open mouth and at full speed upon him. Captain Lewis ran about eighty yards, but finding that the animal gained on him fast, it flashed on his mind that by getting into the water to such a depth that the bear would be obliged to attack him swimming, there was still some chance of his life; he therefore turned short, plunged into the river about waist deep, and facing about presented the point of his espontoon. The bear arrived at the water's edge within twenty feet of him, but as soon as he put himself in this posture of defence, he seemed frightened, and wheeling about, retreated with as much precipitation as he had pursued. Very glad to be released from this danger, captain Lewis returned to the shore, and observed him run with great speed, sometimes looking back as if he expected to be pursued, till he reached the woods. He could not conceive the cause of the sudden alarm of the bear, but congratulated himself on his escape when he saw his own track torn to pieces by the furious animal, and learnt from the whole adventure never to suffer his rifle to be a moment unloaded. He now resumed his progress in the direction which the bear had taken towards the western river, and found it a hand-
some stream about two hundred yards wide, apparently deep, with a gentle current; its waters clear, and its banks, which were formed principally of dark brown and blue clay, are about the same height as those of the Missouri, that is from three to five feet. What was singular was that the river does not seem to overflow its banks at any season, while it might be presumed from its vicinity to the mountains, that the torrents arising from the melting of the snows, would sometimes cause it to swell beyond its limits. The contrary fact would induce a belief that the Rocky mountains yield their snows very reluctantly and equably to the sun, and are not often drenched by very heavy rains. This river is no doubt that which the Indians call Medicine river, which they mentioned as emptying into the Missouri, just above the falls. After examining Medicine river, captain Lewis set out at half after six o’clock in the evening on his return towards the camp, which he estimated at the distance of twelve miles. In going through the low grounds on Medicine river he met an animal which at a distance he thought was a wolf, but on coming within sixty paces, it proved to be some brownish yellow animal standing near its burrow, which, when he came nigh, crouched and seemed as if about to spring on him. Captain Lewis fired and the beast disappeared in its burrow. From the track and the general appearance of the animal he supposed it to be of the tiger kind. He then went on, but as if the beasts of the forests had conspired against him, three buffaloe bulls which were feeding with a large herd at the distance of half a mile, left their companions and ran at full speed towards him. He turned round, and unwilling to give up the field advanced towards them: when they came within a hundred yards, they stopped, looked at him for some time, and then retreated as they came. He now pursued his route in the dark, reflecting on the strange adventures and sights of the day which crowded on his mind so rapidly that he should have been inclined to believe it all enchantment if the thorns of the prickly pear piercing his feet did not
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dispel at every moment the illusion. He at last reached the party, who had been very anxious for his safety, and who had already decided on the route which each should take in the morning to look for him. Being much fatigued he supped and slept well during the night.

Saturday, 15. The men were again sent out to bring in the game killed yesterday and to procure more: they also obtained a number of fine trout and several small catfish weighing about four pounds, and differing from the white catfish lower down the Missouri. On awaking this morning captain Lewis found a large rattlesnake coiled on the trunk of a tree under which he had been sleeping. He killed it, and found it like those we had seen before, differing from those of the Atlantic states, not in its colours but in the form and arrangement of them; it had one hundred and seventy-six scuta on the abdomen, and seventeen half-formed scuta on the tail. There is a heavy dew on the grass about the camp every morning, which no doubt proceeds from the mist of the falls, as it takes place no where in the plains nor on the river except here. The messenger sent to captain Clarke returned with information of his having arrived five miles below at a rapid, which he did not think it prudent to ascend and would wait till captain Lewis and his party rejoined him.

On Tuesday 11th, the day when captain Lewis left us, we remained at the entrance of Maria's river and completed the deposits of all the articles with which we could dispense. The morning had been fair with a high wind from the southwest, which shifted in the evening to northwest, when the weather became cold and the wind high. The next morning,

Wednesday, 12, we left our encampment with a fair day and a southwest wind. The river was now so crowded with islands that within the distance of ten miles and a half we passed eleven of different dimensions before reaching a high black bluff in a bend on the left, where we saw a great number of swallows. Within one mile and a half further we
passed four small islands, two on each side, and at fifteen miles from our encampment reached a spring which the men called Grog spring; it is on the northern shore, and at the point where Tansy river approaches within one hundred yards of the Missouri. From this place we proceeded three miles to a low bluff on the north opposite to an island, and spent the night in an old Indian encampment. The bluffs under which we passed were composed of a blackish clay and coal for about eighty feet, above which for thirty or forty feet is a brownish yellow earth. The river is very rapid and obstructed by bars of gravel and stone of different shapes and sizes, so that three of our canoes were in great danger in the course of the day. We had a few drops of rain about two o'clock in the afternoon. The only animals we killed were elk and deer; but we saw great numbers of rattlesnakes.

Thursday, 13. The morning was fair and there was some dew on the ground. After passing two islands we reached at the distance of a mile and a half a small rapid stream fifty yards wide, emptying itself on the south, rising in a mountain to the southeast about twelve or fifteen miles distant, and at this time covered with snow. As it is the channel for the melted snow of that mountain we called it Snow river; opposite to its entrance is another island: at one mile and three quarters is a black bluff of slate on the south; nine miles beyond which, after passing ten islands, we came to on the southern shore near an old Indian fortified camp, opposite the lower point of an island, having made thirteen miles. The number of islands and shoals, the rapidity of the river, and the quantity of large stones, rendered the navigation very disagreeable: along the banks we distinguished several low bluffs or cliffs of slate. There were great numbers of geese and goslings; the geese not being able to fly at this season. Gooseberries are ripe and in great abundance; the yellow currant is also common, but not yet ripe. Our game consisted of buffaloe and goats.
Up the Missouri.

Friday, 14. Again the day is fine. We made two miles to a small island in the southern bend, after passing several bad rapids. The current becomes indeed swifter as we ascend, and the canoes frequently receive water as we drag them with difficulty along. At the distance of six miles we reached captain Clarke’s camp on the fourth, which is on the north side and opposite to a large gravelly bar. Here the man sent by captain Lewis joined us with the pleasing intelligence that he had discovered the falls, and was convinced that the course we were pursuing was that of the true Missouri. At a mile and a half we reached the upper point of an island, three quarters of a mile beyond which we encamped on the south, after making only ten and a quarter miles. Along the river was but little timber, but much hard slate in the bluffs.

Saturday, 15. The morning being warm and fair we set out at the usual hour, but proceeded with great difficulty in consequence of the increased rapidity of the current. The channel is constantly obstructed by rocks and dangerous rapids. During the whole progress the men are in the water hauling the canoes, and walking on sharp rocks and round stones which cut their feet or cause them to fall. The rattlesnakes too are so numerous that the men are constantly on their guard against being bitten by them; yet they bear the fatigues with the most undiminished cheerfulness. We hear the roar of the falls very distinctly this morning. At three and three quarter miles we came to a rock in a bend to the south, resembling a tower. At six and three quarter miles we reached a large creek on the south, which after one of our men we called Shields’s creek. It is rapid in its course, about thirty yards wide, and on sending a person five miles up it proved to have a fall of fifteen feet, and some timber on its low ground. Above this river the bluffs of the Missouri are of red earth mixed with stratas of black stone; below it we passed some white clay in the banks which mixes with water in every respect like...
flour. At three and three quarter miles we reached a point on the north opposite an island and a bluff; and one mile and a quarter further, after passing some red bluffs, came to on the north side, having made twelve miles. Here we found a rapid so difficult that we did not think proper to attempt the passage this evening, and therefore sent to captain Lewis to apprise him of our arrival. We saw a number of geese, ducks, crows, and blackbirds to-day, the two former with their young. The river rose a little this evening, but the timber is still so scarce that we could not procure enough for our use during the night.

Sunday, June 16. Some rain fell last night, and this morning the weather was cloudy and the wind high from the southwest. We passed the rapid by doubly manning the periogue and canoes, and halted at the distance of a mile and a quarter to examine the rapids above, which we found to be a continued succession of cascades as far as the view extended, which was about two miles. About a mile above where we halted was a large creek falling in on the south, opposite to which is a large sulphur spring falling over the rocks on the north: captain Lewis arrived at two from the falls about five miles above us, and after consulting upon the subject of the portage, we crossed the river and formed a camp on the north, having come three quarters of a mile to-day. From our own observation we had deemed the south side to be the most favourable for a portage, but two men sent out for the purpose of examining it, reported that the creek and the ravines intersected the plain so deeply that it was impossible to cross it. Captain Clarke therefore resolved to examine more minutely what was the best route: the four canoes were unloaded at the camp and then sent across the river, where by means of strong cords they were hauled over the first rapid, whence they may be easily drawn into the creek. Finding too, that the portage would be at all events too long to enable us to carry the boats on our shoulders, six men were set to work to make wheels for car-
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Mariages to transport them. Since leaving Maria's river, the wife of Chaboneau, our interpreter, has been dangerously ill, but she now found great relief from the mineral water of the sulphur spring. It is situated about two hundred yards from the Missouri, into which it empties over a precipice of rock about twenty-five feet high. The water is perfectly transparent, strongly impregnated with sulphur, and we suspect iron also, as the colour of the hills and bluffs in the neighbourhood indicates the presence of that metal. In short the water to all appearance is precisely similar to that of Bowyer's sulphur spring in Virginia.

Monday 17. Captain Clarke set out with five men to explore the country; the rest were employed in hunting, making wheels and in drawing the five canoes and all the baggage up the creek, which we now called Portage creek: from this creek there is a gradual ascent to the top of the high plain, while the bluffs of the creek lower down and of the Missouri, both above and below its entrance, were so steep as to have rendered it almost impracticable to drag them up from the Missouri. We found great difficulty and some danger in even ascending the creek thus far, in consequence of the rapids and rocks of the channel of the creek, which just above where we brought the canoes has a fall of five feet, and high and steep bluffs beyond it: we were very fortunate in finding just below Portage creek a cottonwood tree about twenty-two inches in diameter, and large enough to make the carriage wheels: it was perhaps the only one of the same size within twenty miles; and the cottonwood, which we are obliged to employ in the other parts of the work, is extremely soft and brittle. The mast of the white periogue which we mean to leave behind, supplied us with two axletrees. There are vast quantities of buffaloe feeding in the plains or watering in the river, which is also strewed with the floating carcasses and limbs of these animals. They go in large herds to water about the falls, and as all the passages to the river near that place are nar-
row and steep, the foremost are pressed into the river by the impatience of those behind. In this way we have seen ten or a dozen disappear over the falls in a few minutes. They afford excellent food for the wolves, bears, and birds of prey; and this circumstance may account for the reluctance of the bears to yield their dominion over the neighbourhood.

Tuesday 18. The periogue was drawn up a little below our camp and secured in a thick copse of willow bushes. We now began to form a cache or place of deposit and to dry our goods and other articles which required inspection. The wagons too are completed. Our hunters brought us ten deer, and we shot two out of a herd of buffaloe that came to water at the sulphur spring. There is a species of gooseberry growing abundantly among the rocks on the sides of the cliffs: it is now ripe, of a pale red colour, about the size of the common gooseberry, and like it is an ovate pericarp of soft pulp enveloping a number of small whitish coloured seeds, and consisting of a yellowish slimy mucilaginous substance, with a sweet taste; the surface of the berry is covered with a glutinous adhesive matter, and its fruit though ripe retains its withered corolla. The shrub itself seldom rises more than two feet high, is much branched, and has no thorns. The leaves resemble those of the common gooseberry except in being smaller, and the berry is supported by separate peduncles or footstalks half an inch long. There are also immense quantities of grasshoppers of a brown colour in the plains, and they no doubt contribute to the lowness of the grass, which is not generally more than three inches high, though it is soft, narrow-leafed and affords a fine pasture for the buffaloe.

Wednesday 19. The wind blew violently to-day, as it did yesterday, and as it does frequently in this open country, where there is not a tree to break or oppose its force. Some men were sent for the meat killed yesterday which fortunately had not been discovered by the wolves. Another party went to Medicine river in quest of elk, which we hope may be
induced to resort there, from there being more wood in that neighbourhood than on the Missouri. All the rest were occupied in packing the baggage and mending their moccasins, in order to prepare for the portage. We caught a number of the white fish, but no catfish or trout. Our poor Indian woman, who had recovered so far as to walk out, imprudently ate a quantity of the white apple, which with some dried fish occasioned a return of her fever.

The meridian altitude of the sun's lower limb, as observed with octant by back observation, was 53º 15', giving as the latitude of our camp, 47º 8' 59" 5'".

Thursday 20. As we were desirous of getting meat enough to last us during the portage, so that the men might not be diverted from their labour to look for food, we sent out four hunters to-day: they killed eleven buffaloe. This was indeed an easy labour, for there are vast herds coming constantly to the opposite bank of the river to water; they seem also to make much use of the mineral water of the sulphur spring, but whether from choice, or because it is more convenient than the river, we cannot determine, as they sometimes pass near the spring and go on to the river. Besides this spring, brackish water or that of a dark colour impregnated with mineral salts, such as we have frequently met on the Missouri, may be found in small quantities in some of the steep ravines on the north side of the river opposite to us and at the falls.

Captain Clarke returned this evening, having examined the whole course of the river and fixed the route most practicable for the portage. The first day, 17th, he was occupied in measuring the heights and distances along the banks of the river, and slept near a ravine at the foot of the crooked falls, having very narrowly escaped falling into the river, where he would have perished inevitably, in descending the cliffs near the grand cataract. The next day, 18th, he continued the same occupation, and arrived in the afternoon at the junction of Medicine and Missouri rivers; up the lat-
ter he ascended, and passed at the distance of a mile an island and a little timber in an eastwardly bend of the river. One mile beyond this he came to the lower point of a large island; another small island in the middle of the river, and one near the left shore at the distance of three miles, opposite to the head of which he encamped near the mouth of a creek which appeared to rise in the South mountain. These three islands are opposite to each other, and we gave them the name of the Whitebear islands from observing some of those animals on them. He killed a beaver, an elk and eight buffaloe. One of the men who was sent a short distance from the camp to bring home some meat, was attacked by a white bear, and closely pursued within forty paces of the camp, and narrowly escaped being caught. Captain Clarke immediately went with three men in quest of the bear, which he was afraid might surprise another of the hunters who was out collecting the game. The bear was however too quick, for before captain Clarke could reach the man, the bear had attacked him and compelled him to take refuge in the water. He now ran off as they approached, and it being late they deferred pursuing him till the next morning.
CHAPTER XI.

Description and romantic appearance of the Missouri at the junction of the Medicine river—the difficulty of transporting the baggage at the falls—the party employed in the construction of a boat of skins—the embarrassments they had to encounter for want of proper materials—during the work the party much troubled by white bears—violent hall-storm, and providential escape of captain Clarke and his party—description of a remarkable fountain—singular explosion heard from the Black mountains—the boat found to be insufficient, and the serious disappointment of the party—captain Clarke undertakes to repair the damage by building canoes, and accomplishes the task.

On the 19th, captain Clarke not being able to find the bear mentioned in the last chapter, spent the day in examining the country both above and below the Whitebear islands, and concluded that the place of his encampment would be the best point for the extremity of the portage. The men were therefore occupied in drying the meat to be left here. Immense numbers of buffaloe are every where round, and they saw a summer duck which is now sitting. The next morning, 20th, he crossed the level plain, fixed stakes to mark the route of the portage, till he passed a large ravine which would oblige us to make the portage farther from the river: after this there being no other obstacle he went to the river where he had first struck it, and took its courses and distances down to the camp. From the draught and survey of captain Clarke, we had now a clear and connected view of the falls, cascades, and rapids of the Missouri.

This river is three hundred yards wide at the point where it receives the waters of Medicine river, which is one hundred and thirty-seven yards in width. The united current continues three hundred and twenty-eight poles to a
small rapid on the north side, from which it gradually widens to one thousand four hundred yards, and at the distance of five hundred and forty-eight poles reaches the head of the rapids, narrowing as it approaches them. Here the hills on the north which had withdrawn from the bank closely border the river, which, for the space of three hundred and twenty poles, makes its way over the rocks with a descent of thirty feet: in this course the current is contracted to five hundred and eighty yards, and after throwing itself over a small pitch of five feet, forms a beautiful cascade of twenty-six feet five inches; this does not however fall immediately perpendicular, being stopped by a part of the rock which projects at about one third of the distance. After descending this fall, and passing the cottonwood island on which the eagle has fixed its nest, the river goes on for five hundred and thirty-two poles over rapids and little falls, the estimated descent of which is thirteen feet six inches till it is joined by a large fountain boiling up underneath the rocks near the edge of the river, into which it falls with a cascade of eight feet. It is of the most perfect clearness and rather of a bluish cast: and even after falling into the Missouri it preserves its colour for half a mile. From this fountain the river descends with increased rapidity for the distance of two hundred and fourteen poles, during which the estimated descent is five feet: from this for a distance of one hundred and thirty-five poles, the river descends fourteen feet seven inches including a perpendicular fall of six feet seven inches. The river has now become pressed into a space of four hundred and seventy-three yards, and here forms a grand cataract by falling over a plain rock the whole distance across the river to the depth of forty-seven feet eight inches: after recovering itself the Missouri then proceeds with an estimated descent of three feet, till at the distance of one hundred and two poles it again is precipitated down the Crooked falls of nineteen feet perpendicular; below this at the mouth of a deep ra-
vine is a fall of five feet, after which for the distance of nine hundred and seventy poles the descent is much more gradual, not being more than ten feet, and then succeeds a handsome level plain for the space of one hundred and seventy-eight poles with a computed descent of three feet, making a bend towards the north. Thence it descends during four hundred and eighty poles, about eighteen feet and a half, when it makes a perpendicular fall of two feet, which is ninety poles beyond the great cataract, in approaching which it descends thirteen feet within two hundred yards, and gathering strength from its confined channel, which is only two hundred and eighty yards wide, rushes over the fall to the depth of eighty-seven feet and three quarters of an inch. After raging among the rocks and losing itself in foam, it is compressed immediately into a bed of ninety-three yards in width: it continues for three hundred and forty poles to the entrance of a run or deep ravine where there is a fall of three feet, which, joined to the decline of the river during that course, makes the descent six feet. As it goes on the descent within the next two hundred and forty poles is only four feet: from this passing a run or deep ravine the descent for four hundred poles is thirteen feet; within two hundred and forty poles a second descent of eighteen feet; thence one hundred and sixty poles a descent of six feet; after which to the mouth of Portage creek, a distance of two hundred and eighty poles, the descent is ten feet. From this survey and estimate it results that the river experiences a descent of three hundred and fifty-two feet in the course of two and three quarter miles, from the commencement of the rapids to the mouth of Portage creek, exclusive of the almost impassable rapids which extend for a mile below its entrance.

The latitude of our camp below the entrance of Portage creek, was found to be 47° 7' 10" 3, as deduced from a meridian altitude of the sun's lower limb taken with octant by back observation giving 53° 10'.
Friday, June 21. Having made the necessary preparations for continuing our route, a part of the baggage was carried across the creek into the high plain, three miles in advance and placed on one of the carriages with truck wheels: the rest of the party was employed in drying meat and dressing elk skins. We killed several muledeer and an elk, and observed as usual vast quantities of buffaloe who came to drink at the river. For the first time on the Missouri we have seen near the falls a species of fishing duck, the body of which is brown and white, the wings white, and the head and upper part of the neck of a brick red, with a narrow beak, which seems to be of the same kind common in the Susquehanna, Potomac and James' river. The little wood which this neighbourhood affords consists of the broad and narrow-leafed cottonwood, the box alder, the narrow and broad-leafed willow, the large or sweet willow, which was not common below Maria's river, but which here attains the same size and has the same appearance as in the Atlantic states. The undergrowth consists of roses, gooseberries, currants, small honeysuckles, and the redwood, the inner part of which the engages or watermen are fond of smoking when mixed with tobacco.

Saturday, 22. We now set out to pass the portage and halted for dinner at eight miles distance near a little stream. The axletrees of our carriage, which had been made of an old mast, and the cottonwood tongues broke before we came there: but we renewed them with the timber of the sweet willow, which lasted till within half a mile of our intended camp, when the tongues gave way and we were obliged to take as much baggage as we could carry on our backs down to the river, where we formed an encampment in a small grove of timber opposite to the Whitebear islands. Here the banks on both sides of the river are handsome, level, and extensive; that near our camp is not more than two feet above the surface of the water. The river is about eight hundred yards wide just above these islands, ten feet deep
in most places, and with a very gentle current. The plains however on this part of the river are not so fertile as those from the mouth of the Muscleshell and thence downwards; there is much more stone on the sides of the hills and on the broken lands than is to be found lower down. We saw in the plains vast quantities of buffaloe, a number of small birds, and the large brown curlew, which is now sitting, and lays its eggs, which are of a pale blue with black specks, on the ground without any nest. There is also a species of lark much resembling the bird called the oldfield lark, with a yellow breast and a black spot on the croup; though it differs from the latter in having its tail formed of feathers of an unequal length and pointed; the beak too is somewhat longer and more curved, and the note differs considerably.

The prickly pear annoyed us very much to-day by sticking through our moccasins. As soon as we had kindled our fires we examined the meat which captain Clarke had left here, but found that the greater part of it had been taken by the wolves.

Sunday, 23. After we had brought up the canoe and baggage captain Clarke went down to the camp at Portage creek, where four of the men had been left with the Indian woman. Captain Lewis during the morning prepared the camp, and in the afternoon went down in a canoe to Medicine river to look after the three men who had been sent thither to hunt on the 19th, and from whom nothing had as yet been heard. He went up the river about half a mile and then walked along on the right bank, hallooing as he went, till at the distance of five miles he found one of them who had fixed his camp on the opposite bank, where he had killed seven deer and dried about six hundred pounds of buffaloe meat, but had killed no elk, the animal chiefly wanted. He knew nothing of his companions except that on the day of their departure from camp he had left them at the falls and come on to Medicine river, not having seen them since. As it was too late to return captain Lewis passed
over on a raft which he made for the purpose and spent the night at Shannon's camp, and the next morning,

Monday, 24, sent J. Fields up the river with orders to go four miles and return, whether he found the two absent hunters or not; then descending the southwest side of Medicine river, he crossed the Missouri in the canoe, and sent Shannon back to his camp to join Fields and bring the meat which they had killed: this they did, and arrived in the evening at the camp on Whitebear islands. A part of the men from Portage creek also arrived with two canoes and baggage. On going down yesterday captain Clarke cut off several angles of the former route so as to shorten the Portage considerably, and marked it with stakes: he arrived there in time to have two of the canoes carried up in the high plain about a mile in advance. Here they all repaired their moccasins, and put on double soals to protect them from the prickly pear and from the sharp points of earth which have been formed by the trampling of the buffaloe during the late rains: this of itself is sufficient to render the portage disagreeable to one who had no burden; but as the men are loaded as heavily as their strength will permit, the crossing is really painful: some are limping with the soreness of their feet, others are scarcely able to stand for more than a few minutes from the heat and fatigue: they are all obliged to halt and rest frequently, and at almost every stopping place they fall and many of them are asleep in an instant; yet no one complains and they go on with great cheerfulness. At their camp Drewyer and Fields joined them, and while captain Lewis was looking for them at Medicine river, they returned to report the absence of Shannon about whom they had been very uneasy. They had killed several buffaloe at the bend of the Missouri above the falls: and dried about eight hundred pounds of meat and got one hundred pounds of tallow: they had also killed some deer, but had seen no elk. After getting the party in motion with the canoes captain Clarke returned to his camp at Portage creek.
We were now occupied in fitting up a boat of skins, the frame of which had been prepared for the purpose at Harper's ferry. It was made of iron, thirty-six feet long, four feet and a half in the beam, and twenty-six inches wide in the bottom. Two men had been sent this morning for timber to complete it, but they could find scarcely any even tolerably straight sticks four and a half feet long, and as the cottonwood is too soft and brittle we were obliged to use the willow and box-alder.

Tuesday, 25. The party returned to the lower camp. Two men were sent on the large island to look for timber. J. Fields was sent up the Missouri to hunt elk; but he returned about noon and informed us that a few miles above he saw two white bear near the river, and in attempting to fire at them came suddenly on a third, who being only a few steps off immediately attacked him; that in running to escape from the monster he leaped down a steep bank of the river, where falling on a bar of stone he cut his hand and knee and bent his gun; but fortunately for him the bank concealed him from his antagonist or he would have been most probably lost. The other two returned with a small quantity of bark and timber, which was all they could find on the island; but they had killed two elk: these were valuable, as we are desirous of procuring the skins of that animal in order to cover the boat, as they are more strong and durable than those of the buffaloe, and do not shrink so much in drying. The party that went to the lower camp had one canoe and the baggage carried into the high plain to be ready in the morning, and then all who could make use of their feet had a dance on the green to the music of a violin. We have been unsuccessful in our attempt to catch fish, nor does there seem to be any in this part of the river. We observe a number of water terrapins. There are great quantities of young blackbirds in these islands just beginning to fly. Among the vegetable productions we observe a species of wild rye which is now heading; it rises...
to the height of eighteen or twenty inches, the beard remarkably fine and soft; the culen is jointed, and in every respect except in height it resembles the wild rye. Great quantities of mint too, like the peppermint, are found here.

The winds are sometimes violent in these plains. The men inform us that as they were bringing one of the canoes along on truck-wheels, they hoisted the sail and the wind carried her along for some distance.

Wednesday 26. Two men were sent on the opposite side of the river for bark and timber, of which they procured some, but by no means enough for our purposes. The bark of the cottonwood is too soft, and our only dependence is on the sweet willow, which has a tough strong bark; the two hunters killed seven buffaloe. A party arrived from below with two canoes and baggage, and the wind being from the southeast, they had made considerable progress with the sails. On their arrival one of the men who had been considerably heated and fatigued, swallowed a very hearty draught of water, and was immediately taken ill; captain Lewis bled him with a penknife, having no other instrument at hand, and succeeded in restoring him to health the next day. Captain Clarke formed a second cache or deposit near the camp, and placed the swivel under the rocks near the river. The antelopes are still scattered through the plains; the females with their young, which are generally two in number, and the males by themselves.

Thursday 27. The party were employed in preparing timber for the boat, except two who were sent to hunt. About one in the afternoon a cloud arose from the southwest and brought with it violent thunder, lightning, and hail: soon after it passed the hunters came in from about four miles above us. They had killed nine elk, and three bear. As they were hunting on the river they saw a low ground covered with thick brushwood, where from the tracks along shore they thought a bear had probably taken refuge: they therefore landed, without making a noise, and climbed
a tree about twenty feet above the ground. Having fixed themselves securely, they raised a loud shout, and a bear instantly rushed towards them. These animals never climb, and therefore when he came to the tree and stopped to look at them, Drewyer shot him in the head; he proved to be the largest we have yet seen, his noise appeared to be like that of a common ox, his fore feet measured nine inches across, and the hind feet were seven inches wide, and eleven and three quarters long, exclusive of the talons. One of these animals came within thirty yards of the camp last night, and carried off some buffaloe meat which we had placed on a pole. In the evening after the storm the water on this side of the river became of a deep crimson colour, probably caused by some stream above washing down a kind of soft red stone, which we observe in the neighbouring bluffs and gullies. At the camp below, the men who left us in the morning were busy in preparing their load for to-morrow, which were impeded by the rain, hail, and the hard wind from the northwest.

Friday 28. The party all occupied in making the boat; they obtained a sufficient quantity of willow bark to line her, and over these were placed the elk skins, and when they failed we were obliged to use the buffaloe hide. The white bear have now become exceedingly troublesome; they constantly infest our camp during the night, and though they have not attacked us, as our dog who patroles all night gives us notice of their approach, yet we are obliged to sleep with our arms by our sides for fear of accident, and we cannot send one man alone to any distance, particularly if he has to pass through brushwood. We saw two of them to-day on the large island opposite to us, but as we are all so much occupied now, we mean to reserve ourselves for some leisure moment, and then make a party to drive them from the islands. The river has risen nine inches since our arrival here.
At Portage creek, captain Clarke completed the cache, in which we deposited whatever we could spare from our baggage; some ammunition, provisions, books, the specimens of plants and minerals, and a draught of the river from its entrance to fort Mandan. After closing it he broke up the encampment, and took on all the remaining baggage to the high plain, about three miles. Portage creek has risen considerably in consequence of the rain, and the water had become of a deep crimson colour, and ill tasted; on overtaking the canoe he found that there was more baggage than could be carried on the two carriages, and therefore left some of the heavy articles which could not be injured, and proceeded on to Willowrun where he encamped for the night. Here they made a supper on two buffaloe which they killed on the way; but passed the night in the rain, with a high wind from the southwest. In the morning,

Saturday 29, finding it impossible to reach the end of the portage with their present load, in consequence of the state of the road after the rain, he sent back nearly all his party to bring on the articles which had been left yesterday. Having lost some notes and remarks which he had made on first ascending the river, he determined to go up to the Whitebear islands along its banks, in order to supply the deficiency. He there left one man to guard the baggage, and went on to the falls accompanied by his servant York, Chaboneau and his wife with her young child. On his arrival there he observed a very dark cloud rising in the west which threatened rain, and looked around for some shelter, but could find no place where they would be secure from being blown into the river if the wind should prove as violent as it sometimes does in the plains. At length about a quarter of a mile above the falls he found a deep ravine where there were some shelving rocks, under which he took refuge. They were on the upper side of the ravine near the river, perfectly safe from the rain, and therefore laid down their guns, compass, and other articles which
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they carried with them. The shower was at first moderate, it then increased to a heavy rain, the effects of which they did not feel: soon after a torrent of rain and hail descended; the rain seemed to fall in a solid mass, and instantly collecting in the ravine came rolling down in a dreadful current, carrying the mud and rocks, and every thing that opposed it. Captain Clarke fortunately saw it a moment before it reached them, and springing up with his gun and shotpouch in his left hand, with his right clambered up the steep bluff, pushing on the Indian woman with her child in her arms; her husband too had seized her hand, and was pulling her up the hill, but he was so terrified at the danger that but for captain Clark, himself and his wife and child would have been lost. So instantaneous was the rise of the water, that before captain Clarke had reached his gun and began to ascend the bank, the water was up to his waist, and he could scarce get up faster than it rose, till it reached the height of fifteen feet with a furious current, which had they waited a moment longer would have swept them into the river just above the great falls, down which they must inevitable have been precipitated. They reached the plain in safety, and found York who had separated from them just before the storm to hunt some buffaloe, and was now returning to find his master. They had been obliged to escape so rapidly that captain Clarke lost his compass and umbrella, Chaboneau left his gun, shotpouch, and tomahawk, and the Indian woman had just time to grasp her child, before the net in which it lay at her feet was carried down the current. He now relinquished his intention of going up the river and returned to the camp at Willowrun. Here he found that the party sent this morning for the baggage, had all returned to camp in great confusion, leaving their loads in the plain. On account of the heat they generally go nearly naked, and with no covering on their heads. The hail was so large and driven so furiously against them by the high wind, that it knocked several of them down: one of them particularly was
thrown on the ground three times, and most of them bleeding freely and complained of being much bruised. Willow run had risen six feet since the rain, and as the plains were so wet that they could not proceed, they passed the night at their camp.

At the Whitebear camp also, we had not been insensible to the hail-storm, though less exposed. In the morning there had been a heavy shower of rain, after which it became fair. After assigning to the men their respective employments, captain Lewis took one of them and went to see the large fountain near the falls. For about six miles he passed through a beautiful level plain, and then on reaching the break of the river hills, was overtaken by the gust of wind from the southwest attended by lightning, thunder, and rain: fearing a renewal of the scene on the 27th, they took shelter in a little gully where there were some broad stones with which they meant to protect themselves against the hail; but fortunately there was not much, and that of a small size; so that they felt no inconvenience except that of being exposed without shelter for an hour, and being drenched by the rain: after it was over they proceeded to the fountain which is perhaps the largest in America. It is situated in a pleasant level plain, about twenty-five yards from the river, into which it falls over some steep irregular rocks with a sudden ascent of about six feet in one part of its course. The water boils up from among the rocks and with such force near the centre, that the surface seems higher there than the earth on the sides of the fountain, which is a handsome turf of fine green grass. The water is extremely pure, cold and pleasant to the taste, not being impregnated with lime or any foreign substance. It is perfectly transparent and continues its bluish east for half a mile down the Missouri, notwithstanding the rapidity of the river. After examining it for some time captain Lewis returned to the camp.
Sunday 30. In the morning captain Clarke sent the men to bring up the baggage left in the plains yesterday. On their return the axletrees and carriages were repaired, and the baggage conveyed on the shoulders of the party across Willow run which had fallen as low as three feet. The carriages being then taken over, a load of baggage was carried to the six-mile stake, deposited there, and the carriages brought back. Such is the state of the plains that this operation consumed the day. Two men were sent to the falls to look for the articles lost yesterday; but they found nothing but the compass covered with mud and sand at the mouth of the ravine; the place at which captain Clarke had been caught by the storm, was filled with large rocks. The men complain much of the bruises received yesterday from the hail. A more than usual number of buffaloe appeared about the camp to-day, and furnished plenty of meat: captain Clarke thought that at one view he must have seen at least ten thousand. In the course of the day there was a heavy gust of wind from the southwest, after which the evening was fair.

At the Whitebear camp we had a heavy dew this morning, which is quite a remarkable occurrence. The party continues to be occupied with the boat, the crossbars for which are now finished, and there remain only the strips to complete the wood work: the skins necessary to cover it have already been prepared and they amount to twenty-eight elk skins and four buffaloe skins. Among our game were two beaver, which we have had occasion to observe always are found wherever there is timber. We also killed a large bat or goatsucker of which there are many in this neighbourhood, resembling in every respect those of the same species in the United States. We have not seen the leather-winged bat for some time, nor are there any of the small goatsucker in this part of the Missouri. We have not seen either that species of goatsucker or nightawk called the whippoorwill, which is commonly confounded
in the United States with the large goatsucker which we observe here; this last prepares no nest but lays its eggs in the open plains; they generally begin to sit on two eggs, and we believe raise only one brood in a season: at the present moment they are just hatching their young.

Monday, July 1. After a severe day's work captain Clarke reached our camp in the evening, accompanied by his party and all the baggage except that left at the six-mile stake, for which they were too much fatigued to return. The route from the lower camp on Portage creek to that near Whitebear island, having been now measured and examined by captain Clarke was as follows:

From our camp opposite the last considerable rapid to the entrance of Portage creek south 9° east for three quarters of a mile: thence on a course south 10° east for two miles, though for the canoes the best route is to the left of this course, and strikes Portage one mile and three quarters from its entrance, avoiding in this way a very steep hill which lies above Portage creek: from this south 18° west for four miles, passing the head of a drain or ravine which falls into the Missouri below the great falls, and to the Willow run which has always a plentiful supply of good water and some timber: here the course turns to south 45° west for four miles further; then south 66° west three miles, crossing at the beginning of the course the head of a drain which falls into the Missouri at the Crooked Falls, and reaching an elevated point of the plain from which south 42° west. On approaching the river on this course there is a long and gentle descent from the high plain, after which the road turns a little to the right of the course up the river to our camp. The whole portage is seventeen and three quarter miles.

At the Whitebear camp we were occupied with the boat and digging a pit for the purpose of making some tar. The day has been warm, and the musquitoes troublesome. We were fortunate enough to observe equal altitudes of the
sun with sextant, which since our arrival here we have been prevented from doing, by flying clouds and storms in the evening.

Tuesday, July 2d. A shower of rain fell very early this morning. We then despatched some men for the baggage left behind yesterday, and the rest were engaged in putting the boat together. This was accomplished in about three hours, and then we began to sew on the leather over the crossbars of iron on the inner side of the boat which form the ends of the sections. By two o'clock the last of the baggage arrived, to the great delight of the party who were anxious to proceed. The musquitoes we find very troublesome.

Having completed our celestial observations we went over to the large island to make an attack upon its inhabitants the bears, who have annoyed us very much of late, and who were prowling about our camp all last night. We found that the part of the island frequented by the bear forms an almost impenetrable thicket of the broad-leafed willow: into this we forced our way in parties of three; but could see only one bear, who instantly attacked Drewyer. Fortunately as he was rushing on the hunter shot him through the heart within twenty paces and he fell, which enabled Drewyer to get out of his way: we then followed him one hundred yards and found that the wound had been mortal. Not being able to discover any more of these animals we returned to camp: here in turning over some of the baggage we caught a rat somewhat larger than the common European rat, and of a lighter colour; the body and outer parts of the legs and head of a light lead colour; the inner side of the legs as well as the belly, feet and ears are white; the ears are not covered with hair, and are much larger than those of the common rat; the toes also are longer, the eyes black and prominent, the whiskers very long and full; the tail rather longer than the body, and covered with fine fur and hair of the same size with that on the back, which
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is very close, short, and silky in its texture. This was the first we had met, although its nests are very frequent among the cliffs of rocks and hollow trees, where we also found large quantities of the shells and seed of the prickly pear, on which we conclude they chiefly subsist. The musquitoes are uncommonly troublesome. The wind was again high from the southwest: these winds are in fact always the coldest and most violent which we experience, and the hypothesis which we have formed on that subject is, that the air coming in contact with the Snowy mountains immediately becomes chilled and condensed, and being thus rendered heavier than the air below it descends into the rarified air below or into the vacuum formed by the constant action of the sun on the open unsheltered plains. The clouds rise suddenly near these mountains and distribute their contents partially over the neighbouring plains. The same cloud will discharge hail alone in one part, hail and rain in another, and rain only in a third, and all within the space of a few miles; while at the same time there is snow falling on the mountains to the southeast of us. There is at present no snow on those mountains; that which covered them on our arrival as well as that which has since fallen having disappeared. The mountains to the north and northwest of us are still entirely covered with snow, and indeed there has been no perceptible diminution of it since we first saw them, which induces a belief either that the clouds prevailing at this season do not reach their summits or that they deposit their snow only. They glisten with great beauty when the sun shines on them in a particular direction, and most probably from this glittering appearance have derived the name of the Shining mountains.

Wednesday, 3. Nearly the whole party were employed in different labours connected with the boat, which is now almost completed: but we have not as yet been able to obtain tar from our kiln, a circumstance that will occasion us not a little embarrassment. Having been told
by the Indians that on leaving the falls we should soon pass the buffaloe country, we have before us the prospect of fasting occasionally; but in order to provide a supply we sent out the hunters who killed only a buffaloe and two antelopes, which added to six beaver and two otter have been all our game for two or three days. At ten in the morning we had a slight shower which scarcely wet the grass.

Thursday, July 4th. The boat was now completed except what is in fact the most difficult part, the making her seams secure. We had intended to despatch a canoe with part of our men to the United States early this spring; but not having yet seen the Snake Indians, or knowing whether to calculate on their friendship or enmity, we have decided not to weaken our party which is already scarcely sufficient to repel any hostility. We were afraid too that such a measure might dishearten those who remain; and as we have never suggested it to them, they are all perfectly and enthusiastically attached to the enterprise, and willing to encounter any danger to ensure its success. We had a heavy dew this morning.

Since our arrival at the falls we have repeatedly heard a strange noise coming from the mountains in a direction a little to the north of west. It is heard at different periods of the day and night, sometimes when the air is perfectly still and without a cloud, and consists of one stroke only, or of five or six discharges in quick succession. It is loud and resembles precisely the sound of a six pound piece of ordnance at the distance of three miles. The Minnetarees frequently mentioned this noise like thunder, which they said the mountains made; but we had paid no attention to it, believing it to have been some superstition or perhaps a falsehood. The watermen also of the party say that the Pawnees and Ricaras give the same account of a noise heard in the Black mountains to the westward of them. The solution of the mystery given by the philoso-
phy of the watermen is, that it is occasioned by the bursting of the rich mines of silver confined within the bosom of the mountain. An elk and a beaver are all that were killed to-day: the buffaloe seemed to have withdrawn from our neighbourhood, though several of the men who went to-day to visit the falls for the first time, mention that they are still abundant at that place. We contrived however to spread not a very sumptuous but a comfortable table in honour of the day, and in the evening gave the men a drink of spirits, which was the last of our stock. Some of them appeared sensible to the effects of even so small a quantity, and as is usual among them on all festivals, the fiddle was produced and a dance begun, which lasted till nine o'clock, when it was interrupted by a heavy shower of rain. They continued however their merriment till a late hour.

Friday 5. The boat was brought up into a high situation and fires kindled under her in order to dry her more expeditiously. Despairing now of procuring any tar, we formed a composition of pounded charcoal with beeswax and buffaloe tallow to supply its place; should this resource fail us it will be very unfortunate, as in every other respect the boat answers our purposes completely. Although not quite dry she can be carried with ease by five men; her form is as complete as could be wished; very strong, and will carry at least eight thousand pounds with her complement of hands. Besides our want of tar, we have been unlucky in sewing the skins with a needle which had sharp edges instead of a point merely, although a large thong was used in order to fill the hole, yet it shrinks in drying and leaves the hole open, so that we fear the boat will leak.

A large herd of buffaloe came near us and we procured three of them: besides which were killed two wolves and three antelopes. In the course of the day other herds of buffaloe came near our camp on their way down the river: these herds move with great method and regularity.
Although ten or twelve herds are seen scattered from each other over a space of many miles, yet if they are undisturbed by pursuit they will be uniformly travelling in the same direction.

Saturday 6. Last night there were several showers of rain and hail, attended with thunder and lightning: and about day break a heavy storm came on from the southwest with one continued roar of thunder, and rain and hail. The hail which was as large as musket balls, covered the ground completely; and on collecting some of it, it lasted during the day and served to cool the water. The red and yellow currant is abundant and now ripe, although still a little acid. We have seen in this neighbourhood what we have not met before, a remarkably small fox which associates in bands and burrows in the prairie, like the small wolf, but have not yet been able to obtain any of them, as they are extremely vigilant, and betake themselves on the slightest alarm to their burrows which are very deep.

Sunday 7. The weather is warm but cloudy, so that the moisture retained by the bark after the rain leaves it slowly, though we have small fires constantly under the boat. We have no tents, and therefore are obliged to use the sails to keep off the bad weather. Our buffaloe skins too, are scarcely sufficient to cover our baggage, but the men are now dressing others to replace their present leather clothing, which soon rots by being so constantly exposed to water. In the evening the hunters returned with the skins of only three buffaloe, two antelope, four deer, and three wolf skins, and reported that the buffaloe had gone further down the river; two other hunters who left us this morning could find nothing except one elk: in addition to this we caught a beaver. The mosquitoes still disturb us very much, and the blowing-flies swarm in vast numbers round the boat. At four in the afternoon we had a light shower of rain attended with some thunder and lightning.
Monday 8. In order more fully to replace the notes of the river which he had lost, and which he was prevented from supplying by the storm of the twenty-ninth ult, captain Clarke set out after breakfast, taking with him nearly the whole party with a view of shooting buffaloe if there should be any near the falls. After getting some distance in the plains the men were divided into squads, and he with two others struck the Missouri at the entrance of Medicine river, and thence proceeded down to the great cataract. He found that the immense herds of buffaloe have entirely disappeared, and he thought had gone below the falls. Having made the necessary measurements, he returned through the plains and reached camp late in the evening; the whole party had killed only three buffaloe, three antelopes and a deer; they had also shot a small fox, and brought a living ground-squirrel somewhat larger than those of the United States.

The day was warm and fair, but a slight rain fell in the afternoon. The boat having now become sufficiently dry, we gave it a coat of the composition, which after a proper interval was repeated, and the next morning,

Tuesday 9, she was lanced into the water, and swam perfectly well: the seats were then fixed and the oars fitted; but after we had loaded her, as well as the canoes, and were on the point of setting out a violent wind caused the waves to wet the baggage, so that we were forced to unload them. The wind continued high till evening, when to our great disappointment we discovered that nearly all the composition had separated from the skins, and left the scabs perfectly exposed; so that the boat now leaked very much. To repair this misfortune without pitch is impossible, and as none of that article is to be procured, we therefore, however reluctantly, are obliged to abandon her, after having had so much labour in the construction. We now saw that the section of the boat covered with buffaloe skins on which hair had been left, answered better than the elk skins and leaked but little; while that part which was covered with
hair about one eighth of an inch, retained the composition perfectly, and remained sound and dry. From this we perceived that had we employed buffaloe instead of elk skins, and not singed them so closely as we have done, carefully avoiding to cut the leather in sewing, the boat would have been sufficient even with the present composition, or had we signed instead of shaving the elk skins we might have succeeded. But we discovered our error too late: the buffaloe had deserted us, the travelling season was so fast advancing that we had no time to spare for experiments, and therefore finding that she could be no longer useful she was sunk in the water, so as to soften the skins and enable us the more easily to take her to pieces. It now became necessary to provide other means for transporting the baggage which we had intended to stow in her. For this purpose we shall want two canoes, but for many miles below the mouth of the Muscleshell river to this place, we have not seen a single tree fit to be used in that way. The hunters however who had hitherto been sent after timber, mention that there is a low ground on the opposite side of the river, about eight miles above us by land, and more than twice that distance by water, in which we may probably find trees large enough for our purposes. Captain Clarke therefore determined to set out by land for that place with ten of the best workmen who would be occupied in building the canoes till the rest of the party, after taking the boat to pieces and making the necessary deposits, should transport the baggage and join them with the other six canoes.

Wednesday 10. He accordingly passed over to the opposite side of the river with his party, and proceeded on eight miles by land, the distance by water being twenty-three and three quarter miles. Here he found two cottonwood trees, but on cutting them down, one proved to be hollow, split at the top in falling, and both were much damaged at the bottom. He searched the neighbourhood but could find none which would suit better, and therefore was obliged to make use of those
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which he had felled, shortening them in order to avoid the cracks, and supplying the deficiency by making them as wide as possible. They were equally at a loss for wood of which they might make handles for their axes, the eyes of which not being round they were obliged to split the timber in such a manner that thirteen of the handles broke in the course of the day, though made of the best wood they could find for the purpose, which was the chokecherry.

The rest of the party took the frame of the boat to pieces, deposited it in a cache or hole, with a draught of the country from fort Mandan to this place, and also some other papers and small articles of less importance. After this we amused ourselves with fishing, and although we had thought on our arrival that there were none in this part of the river, we caught some of a species of white chub below the falls, but few in number, and small in size.

Serjeant Ordway with four canoes and eight men had set sail in the morning, with part of the baggage to the place where captain Clarke had fixed his camp, but the wind was so high that he only reached within three miles of that place, and encamped for the night.

Thursday, July 11. In the morning one of the canoes joined captain Clarke: the other three having on board more valuable articles, which would have been injured by the water, went on more cautiously, and did not reach the camp till the evening. Captain Clarke then had the canoes unloaded and sent back, but the high wind prevented their floating down nearer than about eight miles above us. His party were busily engaged with the canoes, and their hunters supplied them with three fat deer and a buffalo, in addition to two deer and an antelope killed yesterday. The few men who were with captain Lewis were occupied in hunting, but with not much success, having killed only one buffalo. They heard about sunset two discharges of the tremendous mountain artillery: they also saw several very large gray eagles, much larger than those of the United
Up the Missouri.

States, and most probably a distinct species, though the bald eagle of this country is not quite so large as that of the United States. The men have been much afflicted with painful whitlows, and one of them disabled from working by this complaint in his hand.

Friday, 12. In consequence of the wind the canoes did not reach the lower camp till late in the afternoon, before which time captain Lewis sent all the men he could spare up the river to assist in building the boats, and the day was too far advanced to reload and send them up before morning. The musquitoes are very troublesome, and they have a companion not less so, a large black gnat which does not sting, but attacks the eyes in swarms. The party with captain Clarke are employed on the canoes; in the course of the work sergeant Pryor dislocated his shoulder yesterday, but it was replaced immediately, and though painful does not threaten much injury. The hunters brought in three deer and two otter. This last animal has been numerous since the water has become sufficiently clear for them to take fish. The blue-crested fisher, or as it is sometimes called, the king-fisher, is an inhabitant of this part of the river; it is a bird rare on the Missouri; indeed we had not seen more than three or four of them from its entrance to Maria’s river, and even those did not seem to reside on the Missouri but on some of the clearer streams which empty into it, as they were seen near the mouths of those streams.

Saturday 13. The morning being fair and calm captain Lewis had all the remaining baggage embarked on board the six canoes, which sailed with two men in each for the upper camp. Then with a sick man and the Indian woman, he left the encampment, and crossing over the river went on by land to join captain Clarke. From the head of the White-bear islands he proceeded in a southwest direction, at the distance of three miles, till he struck the Missouri, which he then followed till he reached the place where all the party were occupied in boat-building. On his way he passed a ve-
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ry large Indian lodge, which was probably designed as a great council-house, but it differs in its construction from all that we have seen lower down the Missouri or elsewhere. The form of it was a circle two hundred and sixteen feet in circumference at the base, and composed of sixteen large cottonwood poles about fifty feet long, and at their thicker ends, which touched the ground, about the size of a man's body: they were distributed at equal distances, except that one was omitted to the east, probably for the entrance. From the circumference of this circle the poles converged towards the centre where they were united and secured by large withes of willow brush. There was no covering over this fabric, in the centre of which were the remains of a large fire, and round it the marks of about eighty leathern lodges. He also saw a number of turtledoves, and some pigeons, of which he shot one differing in no respect from the wild pigeon of the United States. The country exhibits its usual appearances, the timber confined to the river, the country on both sides as far as the eye can reach being entirely destitute of trees or brush. In the low ground in which we are building the canoes, the timber is larger and more abundant than we have seen it on the Missouri for several hundred miles. The soil too is good, for the grass and weeds reach about two feet high, being the tallest we have observed this season, though on the high plains and prairies the grass is at no season above three inches in height. Among these weeds are the sandrush, and nettle in small quantities; the plains are still infested by great numbers of the small birds already mentioned, among whom is the brown curlew. The current of the river is here extremely gentle; the buffaloe have not yet quite gone, for the hunters brought in three in very good order. It requires some diligence to supply us plentifully, for as we reserve our parched meal for the Rocky mountains, where we do not expect to find much game, our principal article of food is meat, and the consumption of the whole thirty-two persons belonging to the party, amounts
to four deer, an elk and a deer, or one buffaloe every twenty four hours. The mosquitoes and gnats persecute us as violently as below, so that we can get no sleep unless defended by biers, with which we are all provided. We here found several plants hitherto unknown to us, and of which we preserved specimens.

Serjeant Ordway proceeded with the six canoes five miles up the river, but the wind becoming so high as to wet the baggage he was obliged to unload and dry it. The wind abated at five o'clock in the evening, when he again proceeded eight miles and encamped. The next morning,

Sunday, July 14, he joined us about noon. On leaving the Whitebear camp he passed at a short distance a little creek or run coming in on the left. This had been already examined and called Flattery run; it contains back water only, with very extensive low grounds, which rising into large plains reach the mountains on the east; then passed a willow island on the left within one mile and a half, and reached two miles further a cliff of rocks in a bend on the same side. In the course of another mile and a half he passed two islands covered with cottonwood, box-alder, sweet-willow, and the usual undergrowth, like that of the Whitebear islands. At thirteen and three quarter miles he came to the mouth of a small creek on the left; within the following nine miles he passed three timbered islands, and after making twenty-three and a quarter miles from the lower camp, arrived at the point of woodland on the north where the canoes were constructed.

The day was fair and warm; the men worked very industriously, and were enabled by the evening to lanch the boats, which now want only seats and oars to be complete. One of them is twenty-five, the other thirty-three feet in length and three feet wide. Captain Lewis walked out between three and four miles over the rocky bluffs to a high situation, two miles from the river, a little below Fort Mountain creek. The country which he saw was in most parts
level, but occasionally became varied by gentle rises and descents, but with no timber except along the water. From this position, the point at which the Missouri enters the first chain of the Rocky mountains bore south 28° west about twenty-five miles, according to our estimate.

The northern extremity of that chain north 73° west at the distance of eighty miles.

To the same extremity of the second chain north 65° west one hundred and fifty miles.

To the most remote point of a third and continued chain of these mountains north 50° west about two hundred miles.

The direction of the first chain was from south 20° east to north 20° west; of the second, from south 45° east to north 45° west; but the eye could not reach their southern extremities, which most probably may be traced to Mexico. In a course south 75° west, and at the distance of eight miles is a mountain, which from its appearance we shall call **Fort Mountain**. It is situated in the level plain, and forms nearly a square, each side of which is a mile in extent. These sides, which are composed of a yellow clay with no mixture of rock or stone whatever, rise perpendicularly to the height of three hundred feet, where the top becomes a level plain covered, as captain Lewis now observed, with a tolerably fertile mound two feet thick, on which was a coat of grass similar to that of the plain below: it has the appearance of being perfectly inaccessible, and although the mounds near the falls somewhat resemble it, yet none of them are so large.