

parent 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, exhibits signs of permanent settlements, yet none seems 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 Assiniboin visit the northern side, most probably as high as the 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 perioques, leaving the canoes 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 perioques, the only one we had made of hemp, broke short, and the perioque 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 strata 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, 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 illusion 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 as 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 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 bighorn, 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 in 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 buffalo, particularly near a small lake about eight miles from the river to the south. Notwithstanding the wind was a-head 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 second 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 the 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 distance from the river than near its banks, where the surface of the earth is very generally strewn 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 encampment 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 a-head, 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 lasted 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 Minnetarecs 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 south-east to north-west, and terminating abruptly about south-west 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 north-west, 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 turbidness: 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 its 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 this 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 river in canoes for some distance, then continuing on foot, just leaving themselves time to return by night. 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-leaved 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 wild rose 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 north-west, 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 principally 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 north-west wind high, and the rain wetted them to the skin. Besides the game just mentioned, he observed buffaloe, elk, wolves, foxes, and 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 north-west 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 mouth 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 80 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 buffalo, 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 heath 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 north-west 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 was 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 wetted, 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 north-east, 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 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 espartoon, 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 espartoon, 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.

CHAP. 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. 25° W. to a spring ; thence he went S. 20° W. for eight miles to the river where was an island, from which he proceeded in a course N. 45° 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. 20° 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 south-east approaches the river on the south-east 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 therefore returned across the level plain in a direction north 30° 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 north-east 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 south-west off the mountains: yet the rivers are falling, and the thermometer 40° 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 south-west. 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 45° , 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 $47^{\circ} 21' 12'' 8$, 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 45° 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 69° 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 29° 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 46° . 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 47° 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 $47^{\circ} 24'$ we cannot reasonably hope, by going farther to the northward, to find between this place and the Saskachawan, 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 appears behind the South mountains, and terminates to the south-west 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 north-west.

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 perioques 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 perioque.

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 perioque 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 south-west, 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 $47^{\circ} 25' 17'' 2$ 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

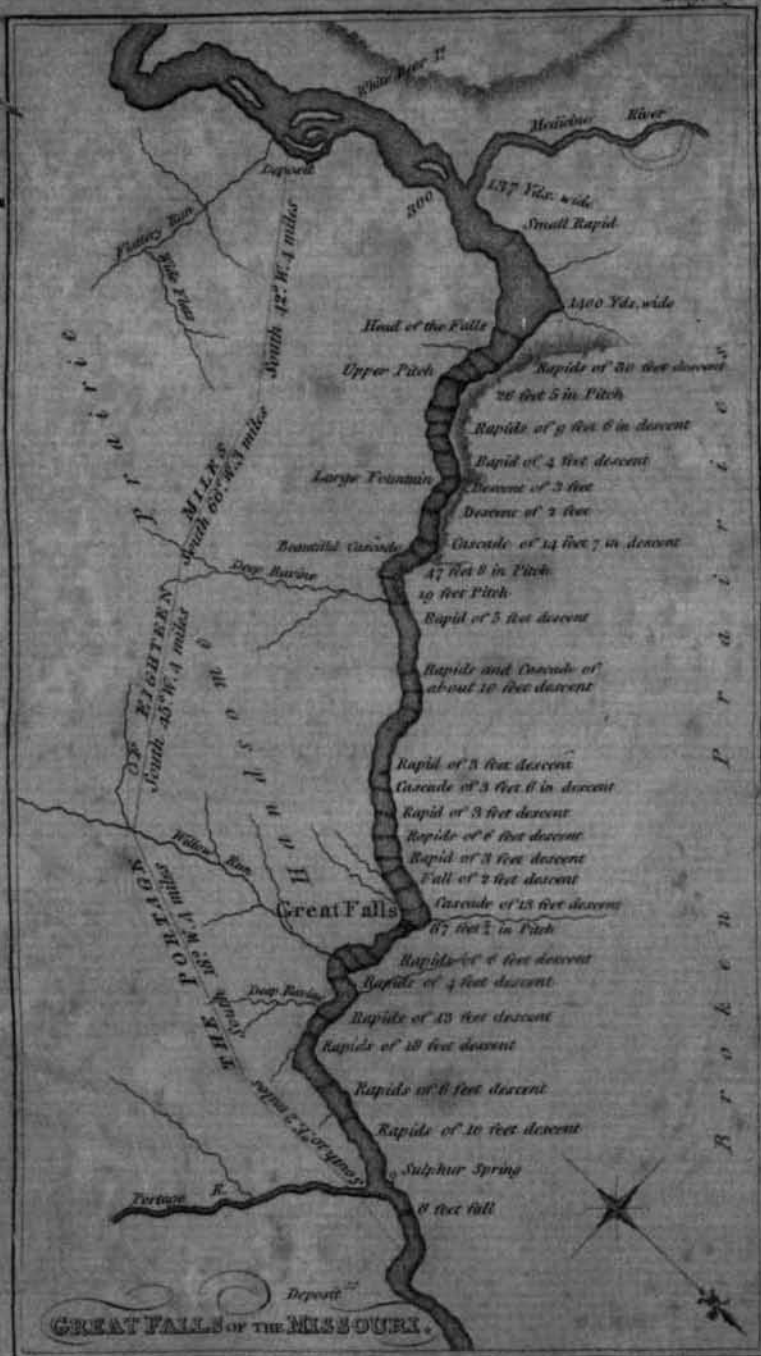
dysentery, was now attacked with violent pains attended by a high fever, and was unable to go on. He therefore encamped for the night under some willow boughs: having brought no medicine he determined to try an experiment with the small twigs of the chokecherry, which being stripped of their leaves and 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 open country he went for twelve miles in a course a little to the west of south-west, 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 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 wolver, 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 south-east to the north of north-west, 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-leaved 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 channelled 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 south-west, 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 south-west 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 south-west 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 perpendicular 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 width of three hundred yards, though with more than its ordinary rapidity.

The hunters who had been sent out, now returned loaded with buffalo meat, and captain Lewis encamped for the night under a tree near the falls. The men were again despatched 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 of red 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 south-west 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 commencement 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 dashing against the rocky bottom it rushes rapidly down, leaving behind it a spray of the purest foam across the river. The scene which it presented was indeed singularly beautiful, 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 descent 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 curiosity being however awakened, he determined to go on, even should night overtake him, to the head of the falls. He therefore pursued the south-west 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 distance of two and a half miles he arrived at another cataract 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 south-west. 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 north-west 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 hills, 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 espartoon. 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 congratulating 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 handsome 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 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 was 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 nowhere 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 south-west, which shifted in the evening to north-west, when the weather became cold and the wind high. The next morning,

Wednesday, 12, we left our encampment with a fair day and a south-west 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 south-east 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 distinguish 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 buffalo and goats.

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 strata 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 south-west. We passed the rapid by doubly manning the perioque 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 carriages 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 perioque, 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 narrow 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 perioque 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 waggon 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-leaved, 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 $53^{\circ} 15'$, giving as the latitude of our camp $47^{\circ} 8' 59'' 5'''$.

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 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 latter 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.

CHAP. 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 EMBARRASMENTS THEY HAD TO ENCOUNTER FOR WANT OF PROPER MATERIALS—DURING THE WORK THE PARTY MUCH TROUBLED BY WHITE BEARS—VIOLENT HAIL 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 found, 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 ravine 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 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 $47^{\circ} 7' 10'' 3$, as deduced from a meridian altitude of the sun's lower limb taken with octant by back observation giving $53^{\circ} 10'$.

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 buffalo 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-leaved cottonwood, the box alder, the narrow and broad-leaved 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 hand-

some, 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 buffalo, 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, hollooming 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 buffalo 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, 24th, 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 south-west 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 soles to protect them from the prickly pear and from the sharp points of earth which have been formed by the trampling of the buffalo during the late rains : this of itself is sufficient to render the Portage disagreeable to one who had no burthen ; 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 buffalo 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 were 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 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 south-east, 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 south-west 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 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, Dreyer 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 buffalo 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 hard wind from the north-west.

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 buffalo hide. The white bear have now become exceedingly troublesome; they constantly infect our camp during the night, and though they have not attacked us, as our dog who patrols 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 south-west. 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 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 Clarke, 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 begun 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. Willowrun 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 a gust of wind from the south-west 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 cast 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 Willowrun 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 south-west, 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 nighthawk 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 Willowrun 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 mosquitoes 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 2. 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 mosquitoes 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-leaved 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 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 south-west: 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 south-east 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 north-west 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 wetted the grass.

Thursday, July 4. The boat was now completed, except what was 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 known 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 philosophy 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 bees-wax 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 south-west 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 launched 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 seams 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 singed 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 from 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 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.

Sergeant 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 buffaloe, 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 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 mosquitoes 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 Whitebear islands he proceeded in a south-west 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 very 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 musquitoes 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.

Sergeant 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 launch 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 to 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 mould 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.

mouth of a small creek on the left; within the following nine miles we passed three hundred 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

The day was fair and warm; the men worked very industriously, and were enabled by the evening to launch the boats, which now went only seven and one half miles. One of them is twenty-five, the other thirty-three feet in length, and three feet wide. Captain Clarke walked out between three and four miles over the rocky plain to a high point of the mountain, a mile below Fort Mountain creek. The country which he saw was in most parts level, but occasionally became varied by gentle rises, and the country was with no timber

CHAP. XII.

THE PARTY EMBARK ON BOARD THE CANOES—DESCRIPTION OF SMITH'S RIVER—CHARACTER OF THE COUNTRY, &c.—DEARBORNE'S RIVER DESCRIBED—CAPTAIN CLARKE PRECEDES THE PARTY FOR THE PURPOSE OF DISCOVERING THE INDIANS OF THE ROCKY MOUNTAINS—MAGNIFICENT ROCKY APPEARANCES ON THE BORDERS OF THE RIVER, DENOMINATED THE GATES OF THE ROCKY MOUNTAINS—CAPTAIN CLARKE ARRIVES AT THE THREE FORKS OF THE MISSOURI WITHOUT OVERTAKING THE INDIANS—THE PARTY ARRIVE AT THE THREE FORKS, OF WHICH A PARTICULAR AND INTERESTING DESCRIPTION IS GIVEN.

MONDAY, July 15. We rose early, embarked all our baggage on board the canoes, which, though eight in number, are still heavily loaded, and at ten o'clock set out on our journey. At the distance of three miles we passed an island, just above which is a small creek coming in from the left, which we called Fort Mountain creek, the channel of which is ten yards wide, but now perfectly dry. At six miles we came to an island opposite to a bend, towards the north side; and reached at seven and a half miles the lower point of a woodland at the entrance of a beautiful river, which, in honour of the secretary of the navy, we called Smith's river. This stream falls into a bend on the south side of the Missouri, and is eighty yards wide. As far as we could discern its course it wound through a charming valley, towards the south-east, in which many herds of buffaloe were feeding, till at the distance of twenty-five miles it entered the rocky mountains, and was lost from our view. After dining near this place we proceeded on four and three quarter miles, to the head of an island; four and a quarter miles beyond which is a second island on the left; three and a quarter miles further in a bend of the river towards the north, is a wood, where we encamped for the night, after making nineteen and three quarter miles.

We find the prickly pear, one of the greatest beauties as well as the greatest inconveniences of the plains, now in full bloom. The sun-flower too,

a plant common on every part of the Missouri, from its entrance to this place, is here very abundant and in bloom. The lamb's-quarter, wild cucumber, sandrush, and narrowdock, are also common. Two elk, a deer, and an otter, were our game to-day.

The river has now become so much more crooked than below, that we omit taking all its short meanders, but note only its general course, and lay down the small bays on our daily chart by the eye. The general width is from one hundred to one hundred and fifty yards. Along the banks are large beds of sand raised above the plains, as they always appear on the sides of the river opposite to the south-west exposure, seem obviously brought there from the channel of the river, by the incessant winds from that quarter: we find also more timber than for a great distance below the falls.

Tuesday, 16. There was a heavy dew last night. We soon passed about forty little booths, formed of willow bushes as a shelter against the sun. These seem to have been deserted about ten days, and we supposed by the Snake Indians, or Shoshonees, whom we hope soon to meet, as they appeared from the tracks to have a number of horses with them. At three and a quarter miles we passed a creek or run, in a bend on the left side, and four miles further another run or small rivulet on the right. After breakfasting on a buffalo shot by one of the hunters, captain Lewis determined to go a-head of the party to the point where the river enters the Rocky mountains, and make the necessary observations before our arrival. He therefore set out with Drewyer, and two of the sick men, to whom he supposed the walk would be useful: he travelled on the north side of the river through a handsome level plain, which continued on the opposite side also, and at the distance of eight miles passed a small stream on which he observed a considerable quantity of the aspen tree. A little before twelve o'clock he halted on a bend to the north, in a low ground covered with timber, about four and a half miles below the mountains, and obtained a meridian altitude, by which we found the latitude was $46^{\circ} 46' 50'' 2''$. His route then lay through a high waving plain to a rapid, where the Missouri first leaves the Rocky mountains, and here he encamped for the night.

In the meantime we had proceeded after breakfast one mile to a bend in the left, opposite to which was the frame to a large lodge situated in the prairie, constructed like that already mentioned above the Whitebear islands, but only sixty feet in diameter; round it, were the remains of about eighty leathern lodges, all which seemed to have been built during the last autumn; within the next fifteen and a quarter miles we passed ten islands, and on the last of which we encamped near the right shore, having made twenty-three miles. The next morning,

Wednesday, 17, we set out early, and at four miles distance joined captain Lewis at the foot of the rapids, and after breakfast began the passage of them: some of the articles most liable to be injured by the water were carried round. We then double-manned the canoes, and with the aid of the towing-line got them up without accident. For several miles below the rapids the current of the Missouri becomes stronger as you approach, and the spurs of the mountain advance towards the river, which is deep and more than seventy yards wide: at the rapids the river is closely hemmed in on both sides by the hills, and foams for half a mile over the rocks which obstruct its channel. The low grounds are now not more than a few yards in width, but they furnish room for an Indian road which winds under the hills on the north side of the river. The general range of these hills is from south-east to north-west, and the cliffs themselves are about eight hundred feet above the water, formed almost entirely of a hard black granite, on which are scattered a few dwarf pine and cedar trees. Immediately in the gap is a large rock four hundred feet high, which on one side is washed by the Missouri, while on its other sides a handsome little plain separates it from the neighbouring mountains. It may be ascended with some difficulty nearly to its summit, and affords a beautiful prospect of the plains below, in which we could observe large herds of buffaloe. After ascending the rapids for half a mile we came to a small island at the head of them, which we called Pine island, from a large pine at the lower end of it, which is the first we have seen near the river for a great distance. A mile beyond captain Lewis's camp we had a meridian altitude which gave us the latitude of $46^{\circ} 42' 14'' 7'''$. As the canoes were still heavily loaded, all those not employed in working them walked on shore. The navigation is now very laborious. The river is deep but with little current, and from seventy to one hundred yards wide; the low grounds are very narrow, with but little timber, and that chiefly the aspen tree. The cliffs are steep and hang over the river so much, that often we could not cross them, but were obliged to pass and repass from one side of the river to the other in order to make our way. In some places the banks are formed of rocks of dark black granite, rising perpendicularly to a great height, through which the river seems, in the progress of time, to have worn its channel. On these mountains we see more pine than usual, but it is still in small quantities. Along the bottoms, which have a covering of high grass, we observe the sunflower blooming in great abundance. The Indians of the Missouri, and more especially those who do not cultivate maize, make great use of the seed of this plant for bread, or in thickening their soup. They first parch, and then pound it between two stones until it is reduced to a fine

meal. Sometimes they add a portion of water, and drink it thus diluted: at other times they add a sufficient proportion of marrow grease to reduce it to the consistency of common dough, and eat it in that manner. This last composition we preferred to all the rest, and thought it at that time a very palatable dish. There is however very little of the broad-leaved cottonwood on the side of the Falls, much the greater part of what we see being of the narrow-leaved species. There are also great quantities of red, purple, yellow, and black currants. The currants are very pleasant to the taste, and much preferable to those of our common garden. The bush rises to the height of six or eight feet; the stem simple, branching, and erect. These shrubs associate in crops either in upper or timbered lands near the water courses. The leaf is petiolate, of a pale green, and in form resembles the red currant, so common in our gardens. The perianth of the fruit is one-leaved, five-cleft, abbreviated, and tubular. The corolla is monopetalous, funnel shaped, very long, and of a fine orange colour. There are five stamens and one pistillum of the first, the filaments are capillar, inserted in the corolla, equal and converging, the anther ovate and incumbent. The germ of the second species is round, smooth, inferior, and pedicelled: the style long and thicker than the stamens, simple, cylindrical, smooth, and erect. It remains with the corolla until the fruit is ripe, the stamen is simple and obtuse, and the fruit much the size and shape of our common garden currants, growing like them in clusters, supported by a compound footstalk. The peduncles are longer in this species, and the berries are more scattered. The fruit is not so acid as the common currant, and has a more agreeable flavour.

The other species differs in no respect from the yellow currant, excepting in the colour and flavour of the berries.

The serviceberry differs in some points from that of the United States. The bushes are small, sometimes not more than two feet high, and rarely exceed eight inches. They are proportionably small in their stems, growing very thick, associated in clumps. The fruit is of the same form, but for the most part larger and of a very dark purple. They are now ripe and in great perfection. There are two species of gooseberry here, but neither of them yet ripe: nor are the chokecherry, though in great quantities. Besides there are also at that place the box-alder, red willow, and a species of sumach. In the evening we saw some mountain rams or big-horned animals, but no other game of any sort. After leaving Pine island we passed a small run on the left, which is formed by a large spring rising at the distance of half a mile under the mountain. One mile and a half above the island is another, and two miles further a third island, the river making small bends constantly to the north. From this last

island to a point of rocks on the south side the low grounds become rather wider, and three quarters of a mile beyond these rocks, in a bend on the north, we encamped opposite to a very high cliff, having made during the day eleven and a half miles.

Thursday, 18. This morning early before our departure we saw a large herd of the big-horned animals, who were bounding among the rocks in the opposite cliff with great agility. These inaccessible spots secure them from all their enemies, and the only danger is in wandering among these precipices, where we should suppose it scarcely possible for any animal to stand; a single false step would precipitate them at least five hundred feet into the water. At one mile and a quarter we passed another single cliff on the left; at the same distance beyond which is the mouth of a large river emptying itself from the north. It is a handsome, bold, and clear stream, eighty yards wide, that is nearly as broad as the Missouri, with a rapid current over a bed of small smooth stones of various figures. The water is extremely transparent, the low grounds are narrow, but possess as much wood as those of the Missouri: and it has every appearance of being navigable, though to what distance we cannot ascertain, as the country which it waters, is broken and mountainous. In honour of the secretary at war we called it Dearborn's river. Being now very anxious to meet with the Shoshonees or Snake Indians, for the purpose of obtaining the necessary information of our route, as well as to procure horses, it was thought best for one of us to go forward with a small party and endeavour to discover them, before the daily discharge of our guns, which is necessary for our subsistence, should give them notice of our approach: if by an accident they hear us, they will most probably retreat to the mountains, mistaking us for their enemies who usually attack them on this side. Accordingly captain Clarke set out with three men, and followed the course of the river on the north side; but the hills were so steep at first that he was not able to go much faster than ourselves. In the evening however he cut off many miles of the circuitous course of the river, by crossing a mountain over which he found a wide Indian road, which in many places seems to have been cut or dug down in the earth. He passed also two branches of a stream which he called Ordway's creek, where he saw a number of beaver-dams extending in close succession towards the mountains as far as he could distinguish: on the cliffs were many of the big-horned animals. After crossing this mountain he encamped near a small stream of running water, having travelled twenty miles.

On leaving Dearborn's river we passed at three and a half miles a small creek, and at six beyond it an island on the north side of the river, which makes

within that distance many small bends. At two and a half miles further is another island: three quarters of a mile beyond this is a small creek on the north side. At a mile and a half above the creek is a much larger stream thirty yards wide, and discharging itself with a bold current on the north side: the banks are low, and the bed formed of stones altogether. To this stream we gave the name of Ordway's creek, after sergeant John Ordway. At two miles beyond this the valley widens: we passed several bends of the river, and encamped in the centre of one on the south, having made twenty-one miles. Here we found a small grove of the narrow-leaved cottonwood, there being no longer any of the broad-leaved kind since we entered the mountains. The water of these rivulets which come down from the mountains is very cold, pure, and well tasted. Along their banks as well as on the Missouri the aspen is very common, but of a small kind. The river is somewhat wider than we found it yesterday; the hills more distant from the river and not so high: there are some pines on the mountains, but they are principally confined to the upper regions of them: the low grounds are still narrower and have little or no timber. The soil near the river is good, and produces a luxuriant growth of grass and weeds: among these productions the sunflower holds a very distinguished place. For several days past we have observed a species of flax in the low grounds, the leaf-stem and pericarp of which resemble those of the flax commonly cultivated in the United States: the stem rises to the height of two and a half or three feet, and springs to the number of eight or ten from the same root, with a strong thick bark apparently well calculated for use: the root seems to be perennial, and it is probable that the cutting of the stems may not at all injure it, for although the seeds are not yet ripe, there are young suckers shooting up from the root, whence we may infer that the stems which are fully grown and the proper stage of vegetation to produce the best flax, are not essential to the preservation or support of the root, a circumstance which would render it a most valuable plant. To day we have met with a second species of flax smaller than the first, as it seldom obtains a greater height than nine or twelve inches: the leaf and stem resemble those of the species just mentioned, except that the latter is rarely branched, and bears a single monopetalous bell-shaped blue flower, suspended with its limb downwards. We saw several herds of the big-horn, but they were in the cliffs beyond our reach. We killed an elk this morning and found part of a deer which had been left for us by captain Clarke. He pursued his route,

Friday, 19, early in the morning, and soon passed the remains of several Indian camps formed of willow brush, which seemed to have been deserted this spring. At the same time he observed that the pine trees had been stripped of

their bark about the same season, which our Indian woman says her countrymen do in order to obtain the sap and the soft parts of the wood and bark for food. About eleven o'clock he met a herd of elk and killed two of them, but such was the want of wood in the neighbourhood that he was unable to procure enough to make a fire, and he was therefore obliged to substitute the dung of the buffaloe, with which he cooked his breakfast. They then resumed their course along an old Indian road. In the afternoon they reached a handsome valley watered by a large creek, both of which extended a considerable distance into the mountain: this they crossed, and during the evening travelled over a mountainous country covered with sharp fragments of flint-rock: these bruised and cut their feet very much, but were scarcely less troublesome than the prickly pear of the open plains, which have now become so abundant that it is impossible to avoid them, and the thorns are so strong that they pierce a double sole of dressed deer skin: the best resource against them is a sole of buffaloe hide in parchment. At night they reached the river much fatigued, having passed two mountains in the course of the day and having travelled thirty miles. Captain Clarke's first employment on lighting a fire was to extract from his feet the briars, which he found seventeen in number.

In the meantime we proceeded on very well, though the water appears to increase in rapidity as we advance: the current has indeed been strong during the day and obstructed by some rapids, which are not however much broken by rocks, and are perfectly safe: the river is deep, and its general width is from one hundred to one hundred and fifty yards wide. For more than thirteen miles we went along the numerous bends of the river and then reached two small islands; three and three quarter miles beyond which is a small creek in a bend to the left, above a small island on the right side of the river. We were regaled about ten o'clock P. M. with a thunder-storm of rain and hail which lasted for an hour, but during the day in this confined valley, through which we are passing, the heat is almost insupportable; yet whenever we obtain a glimpse of the lofty tops of the mountains we are tantalized with a view of the snow. These mountains have their sides and summits partially varied with little copses of pine, cedar, and balsam fir. A mile and a half beyond this creek the rocks approach the river on both sides, forming a most sublime and extraordinary spectacle. For five and three quarter miles these rocks rise perpendicularly from the water's edge to the height of nearly twelve hundred feet. They are composed of a black granite near its base, but from its lighter colour above and from the fragments we suppose the upper part to be flint of a yellowish brown and cream colour. Nothing can be imagined more tremendous than the frown-

ing darkness of these rocks, which project over the river and menace us with destruction. The river, of three hundred and fifty yards in width, seems to have forced its channel down this solid mass, but so reluctantly has it given way that during the whole distance the water is very deep even at the edges, and for the first three miles there is not a spot, except one of a few yards, in which a man could stand between the water and the towering perpendicular of the mountain: the convulsion of the passage must have been terrible, since at its outlet there are vast columns of rock torn from the mountain, which are strewed on both sides of the river, the trophies as it were of the victory. Several fine springs burst out from the chasms of the rock, and contribute to increase the river, which has now a strong current, but very fortunately we are able to overcome it with our oars, since it would be impossible to use either the cord or the pole. We were obliged to go on some time after dark, not being able to find a spot large enough to encamp on, but at length about two miles above a small island in the middle of the river we met with a spot on the left side, where we procured plenty of light-wood and pitchpine. This extraordinary range of rocks we called the Gates of the Rocky mountains. We had made twenty-two miles; and four and a quarter miles from the entrance of the Gates. The mountains are higher to-day than they were yesterday. We saw some big-horns, a few antelopes and beaver, but since entering the mountains have found no buffaloe: the otter are however in great plenty: the mosquitoes have become less troublesome than they were.

Saturday, 20. By employing the towrope whenever the banks permitted the use of it, the river being too deep for the pole, we were enabled to overcome the current which is still strong. At the distance of half a mile we came to a high rock in a bend to the left in the Gates. Here the perpendicular rocks cease, the hills retire from the river, and the vallies suddenly widen to a greater extent than they have been since we entered the mountains. At this place was some scattered timber, consisting of the narrow-leaved cottonwood, the aspen, and pine. There are also vast quantities of gooseberries, serviceberries, and several species of currant, among which is one of a black colour, the flavour of which is preferable to that of the yellow, and would be deemed superior to that of any currant in the United States. We here killed an elk, which was a pleasant addition to our stock of food. At a mile from the Gates, a large creek comes down from the mountains and empties itself behind an island in the middle of a bend to the north. To this stream, which is fifteen yards wide, we gave the name of Potts's creek, after John Potts, one of our men. Up this valley about seven miles we discovered a great smoke, as if the whole country

had been set on fire; but were at a loss to decide whether it had been done accidentally by captain Clarke's party, or by the Indians as a signal on their observing us. We afterwards learnt that this last was the fact; for they had heard a gun fired by one of captain Clarke's men, and believing that their enemies were approaching had fled into the mountains, first setting fire to the plains as a warning to their countrymen. We continued our course along several islands, and having made in the course of the day fifteen miles, encamped just above an island, at a spring on a high bank on the left side of the river. In the latter part of the evening we had passed through a low range of mountains, and the country became more open, though still unbroken and without timber, and the lowlands not very extensive: and just above our camp the river is again closed in by the mountains. We found on the banks an elk which captain Clarke had left us, with a note mentioning that he should pass the mountains just above us and wait our arrival at some convenient place. We saw but could not procure some redheaded ducks and sandhill cranes along the sides of the river, and a woodpecker, about the size of the lark-woodpecker, which seems to be a distinct species: it is as black as a crow with a long tail, and flies like a jaybird. The whole country is so infested by the prickly pear that we could scarcely find room to lie down at our camp.

Captain Clarke on setting out this morning had gone through the valley about six miles to the right of the river. He soon fell into an old Indian road which he pursued till he reached the Missouri, at the distance of eighteen miles from his last encampment, just above the entrance of a large creek, which we afterwards called Whiteearth creek. Here he found his party so much cut and pierced with the sharp flint and the prickly pear that he proceeded only a small distance further, and then halted to wait for us. Along his track he had taken the precaution to strew signals, such as pieces of cloth, paper and linen, to prove to the Indians, if by accident they met his track, that we were white men. But he observed a smoke some distance a-head, and concluded that the whole country had now taken the alarm.

Sunday, 21. On leaving our camp we passed an island at half a mile, and reached at one mile a bad rapid at the place where the river leaves the mountain: here the cliffs are high and covered with fragments of broken rocks, the current is also strong, but although more rapid the river is wider and shallower, so that we are able to use the pole occasionally, though we principally depend on the towline. On leaving the rapid which is about half a mile in extent, the country opens on each side; the hills become lower; at one mile is a large island on the left side, and four and a half beyond it a large and bold creek twenty-eight

yards wide, coming in from the north, where it waters a handsome valley: we called it Pryor's creek after one of the sergeants, John Pryor. At a mile above this creek on the left side of the Missouri we obtained a meridian altitude, which gave $46^{\circ} 10' 32'' 9'''$ as the latitude of the place. For the following four miles the country, like that through which we passed during the rest of the day, is rough and mountainous as we found it yesterday; but at the distance of twelve miles we came, towards evening, into a beautiful plain ten or twelve miles wide, and extending as far as the eye could reach. This plain, or rather valley, is bounded by two nearly parallel ranges of high mountains whose summits are partially covered with snow, below which the pine is scattered along the sides down to the plain in some places, though the greater part of their surface has no timber, and exhibits only a barren soil, with no covering except dry parched grass or black rugged rocks. On entering the valley the river assumes a totally different aspect: it spreads to more than a mile in width, and though more rapid than before, is shallow enough in almost every part for the use of the pole, while its bed is formed of smooth stones and some large rocks, as it has been indeed since we entered the mountains: it is also divided by a number of islands, some of which are large near the northern shore. The soil of the valley is a rich black loam, apparently very fertile, and covered with a fine green grass about eighteen inches or two feet in height; while that of the high grounds is perfectly dry and seems scorched by the sun. The timber, though still scarce, is in greater quantities in this valley than we have seen it since entering the mountains, and seems to prefer the borders of the small creeks to the banks of the river itself. We advanced three and a half miles in this valley, and encamped on the left side, having made in all fifteen and a half miles.

Our only large game to-day was one deer. We saw however two pheasants of a dark brown colour, much larger than the same species of bird in the United States. In the morning too, we saw three swans, which, like the geese, have not yet recovered the feathers of the wing, and were unable to fly: we killed two of them, and the third escaped by diving and passing down the current. These are the first we have seen on the river for a great distance, and as they had no young with them, we presume that they do not breed in this neighbourhood. Of the geese we daily see great numbers, with their young perfectly feathered, except on the wings, where both young and old are deficient; the first are very fine food, but the old ones are poor and unfit for use. Several of the large brown or sand-hill crane are feeding in the low grounds on the grass, which forms their principal food. The young crane cannot fly at this season: they are as large as a turkey, of a bright reddish bay colour. Since the river has become

shallow we have caught a number of trout to-day, and a fish, white on the belly and sides, but of a bluish cast on the back, and a long pointed mouth opening somewhat like that of the shad.

This morning captain Clarke wishing to hunt, but fearful of alarming the Indians, went up the river for three miles, when finding neither any of them nor of their recent tracks returned, and then his little party separated to look for game. They killed two bucks and a doe, and a young curlew nearly feathered: in the evening they found the musquitoes as troublesome as we did; these animals attack us as soon as the labours and fatigues of the day require some rest, and annoy us till several hours after dark, when the coldness of the air obliges them to disappear; but such is their persecution, that were it not for our biers we should obtain no repose.

Monday, 22. We set out at an early hour. The river being divided into so many channels by both large and small islands, that it was impossible to lay it down accurately by following in a canoe any single channel, captain Lewis walked on shore, took the general courses of the river, and from the rising grounds laid down the situation of the islands and channels, which he was enabled to do with perfect accuracy, the view not being obstructed by much timber. At one mile and a quarter we passed an island somewhat larger than the rest, and four miles further reached the upper end of another, on which we breakfasted. This is a large island forming in the middle of a bend, to the north a level fertile plain, ten feet above the surface of the water and never overflowed. Here we found great quantities of a small onion about the size of a musket ball, though some were larger; it is white, crisp, and as well flavoured as any of our garden onions; the seed is just ripening, and as the plant bears a large quantity to the square foot, and stands the rigours of the climate, it will no doubt be an acquisition to settlers. From this production we called it Onion island. During the next seven and three-quarter miles we passed several long circular bends, and a number of large and small islands, which divide the river into many channels, and then reached the mouth of a creek on the north side. It is composed of three creeks which unite in a handsome valley, about four miles before they discharge themselves into the Missouri, where it is about fifteen feet wide and eight feet deep, with clear transparent water. Here we halted for dinner, but as the canoes took different channels in ascending, it was some time before they all joined. Here we were delighted to find that the Indian woman recognises the country; she tells us that to this creek her countrymen make excursions to procure a white paint on its banks, and we therefore called it White-earth creek. She says also that the three forks of the Missouri are at no great dis-

tance, a piece of intelligence which has cheered the spirits of us all, as we hope soon to reach the head of that river. This is the warmest day except one we have experienced this summer. In the shade the mercury stood at 80° above 0, which is the second time it has reached that height during this season. We encamped on an island, after making nineteen and three-quarter miles.

In the course of the day we saw many geese, cranes, small birds common to the plains, and a few pheasants: we also observed a small plover or curlew of a brown colour, about the size of the yellow-legged plover or jack curlew, but of a different species. It first appeared near the mouth of Smith's river, but is so shy and vigilant that we were unable to shoot it. Both the broad and narrow-leaved willow continue, though the sweet willow has become very scarce. The rosebush, small honeysuckle, the pulpy-leaved thorn, southern wood, sage and box alder, narrow-leaved cottonwood, redwood, and a species of sumach, are all abundant. So too are the red and black gooseberries, serviceberries, chokecherry, and the black, red, yellow, and purple currant, which last seems to be a favourite food of the bear. Before encamping we landed and took on board captain Clarke, with the meat he had collected during this day's hunt, which consisted of one deer and an elk: we had ourselves shot a deer and an antelope. The mosquitoes and gnats were unusually fierce this evening.

Tuesday, 23. Captain Clarke again proceeded with four men along the right bank. During the whole day the river is divided by a number of islands, which spread it out sometimes to the distance of three miles; the current is very rapid and has many ripples; and the bed formed of gravel and smooth stones. The banks along the low grounds are of a rich loam, followed occasionally by low bluffs, of yellow and red clay, with a hard red slatestone intermixed. The low grounds are wide, and have very little timber, but a thick underbrush of willow, and rose and currant bushes: these are succeeded by high plains extending on each side to the base of the mountains, which lie parallel to the river about eight or twelve miles apart, and are high and rocky, with some small pine and cedar interspersed on them. At the distance of seven miles, a creek twenty yards wide, after meandering through a beautiful low ground on the left for several miles parallel to the river, empties itself near a cluster of small islands: the stream we called Whitehouse creek after Joseph Whitehouse, one of the party, and the islands, from their number, received the name of the "Ten islands." About ten o'clock we came up with Drewyer, who had gone out to hunt yesterday, and not being able to find our encampment had staid out all night: he now supplied us with five deer. Three and a quarter miles beyond Whitehouse creek we came to the lower point of an island where the river is three hundred yards

wide, and continued along it for one mile and a quarter, and then passed a second island just above it. We halted rather early for dinner, in order to dry some part of the baggage which had been wetted in the canoes: we then proceeded, and at five and a half miles had passed two small islands. Within the next three miles we came to a large island, which, from its figure, we called Broad island. From that place we made three and a half miles, and encamped on an island to the left, opposite to a much larger one on the right. Our journey to-day was twenty-two and a quarter miles, the greater part of which was made by means of our poles and cords, the use of which the banks much favoured. During the whole time we had the small flags hoisted in the canoes to apprise the Indians, if there were any in the neighbourhood, of our being white men and their friends; but we were not so fortunate as to discover any of them. Along the shores we saw great quantities of the common thistle, and procured a further supply of wild onions, and a species of garlic growing on the highlands, which is now green and in bloom: it has a flat leaf, and is strong, tough, and disagreeable. There was also much of the wild flax, of which we now obtained some ripe seed, as well as some bullrush and cattail flag. Among the animals we met with a black snake about two feet long, with the belly as dark as any other part of the body, which was perfectly black, and which had one hundred and twenty-eight scuta on the belly, and sixty-three on the tail: we also saw antelopes, crane, geese, ducks, beaver, and otter; and took up four deer, which had been left on the water side by captain Clarke. He had pursued all day an Indian road on the right side of the river, and encamped late in the evening at the distance of twenty-five miles from our camp of last night. In the course of his walk he met besides deer, a number of antelopes and a herd of elk, but all the tracks of Indians, though numerous, were of an old date.

Wednesday, 24. We proceeded for four and a quarter miles along several islands to a small run, just above which the low bluffs touch the river. Within three and a half miles further we came to a small island on the north, and a remarkable bluff, composed of earth of a crimson colour, intermixed with strata of slate, either black or of a red resembling brick. The following six and three-quarter miles brought us to an assemblage of islands, having passed four at different distances; and within the next five miles we met the same number of islands, and encamped on the north, after making nineteen and a half miles. The current of the river was strong and obstructed, as indeed it has been for some days, by small rapids or ripples, which descend from one to three feet in the course of one hundred and fifty yards, but they are rarely incommoded by any fixed rocks, and therefore, though the water is rapid, the passage is not attended with danger.

The valley through which the river passes is like that of yesterday; the nearest hills generally concealing the most distant from us; but when we obtain a view of them they present themselves in amphitheatres, rising above each other as they recede from the river, till the most remote are covered with snow. We saw many otter and beaver to-day; the latter seems to contribute very much to the number of islands and the widening of the river. They begin by damming up the small channels of about twenty yards between the islands; this obliges the river to seek another outlet, and as soon as this is effected the channel stopped by the beaver becomes filled with mud and sand. The industrious animal is then driven to another channel which soon shares the same fate, till the river spreads on all sides, and cuts the projecting points of the land into islands. We killed a deer and saw great numbers of antelopes, cranes, some geese, and a few redheaded ducks. The small birds of the plains, and the curlew, are still abundant: we saw, but could not come within gunshot of a large bear. There is much of the track of elk, but none of the animals themselves, and from the appearance of bones and old excrement, we suppose that buffaloe have sometimes strayed into the valley, though we have as yet seen no recent sign of them. Along the water are a number of snakes, some of a brown uniform colour, others black, and a third speckled on the abdomen, and striped with black and a brownish yellow on the back and sides. The first, which are the largest, are about four feet long; the second is of the kind mentioned yesterday, and the third resembles in size and appearance the garter-snake of the United States. On examining the teeth of all these several kinds we found them free from poison: they are fond of the water, in which they take shelter on being pursued. The mosquitoes, gnats, and prickly pear, our three persecutors, still continue with us, and, joined with the labour of working the canoes, have fatigued us all excessively. Captain Clarke continued along the Indian road which led him up a creek. About ten o'clock he saw at the distance of six miles a horse feeding in the plains. He went towards him, but the animal was so wild that he could not get within several hundred paces of him: he then turned obliquely to the river where he killed a deer and dined, having passed in this valley five handsome streams, only one of which had any timber; another had some willows, and was very much dammed up by the beaver. After dinner he continued his route along the river and encamped at the distance of thirty miles. As he went along he saw many tracks of Indians, but none of recent date. The next morning,

Thursday, 25, at the distance of a few miles he arrived at the three forks of the Missouri. Here he found that the plains had been recently burnt on the north side, and saw the track of a horse which seemed to have passed about

four or five days since. After breakfast he examined the rivers, and finding that the north branch, although not larger, contained more water than the middle branch, and bore more to the westward, he determined to ascend it. He therefore left a note informing captain Lewis of his intention, and then went up that stream on the north side for about twenty-five miles. Here Chaboneau was unable to proceed any further, and the party therefore encamped, all of them much fatigued, their feet blistered and wounded by the prickly pear.

In the meantime we left our camp, and proceeded on very well, though the water is still rapid and has some occasional ripples. The country is much like that of yesterday: there are however fewer islands, for we passed only two. Behind one of them is a large creek twenty-five yards wide, to which we gave the name of Gass's creek, from one of our sergeants, Patrick Gass: it is formed by the union of five streams, which descend from the mountains and join in the plain near the river. On this island we saw a large brown bear, but he retreated to the shore and ran off before we could approach him. These animals seem more shy than they were below the mountains. The antelopes have again collected in small herds, composed of several females with their young, attended by one or two males, though some of the males are still solitary or wander in parties of two over the plains, which the antelope invariably prefers to the woodlands, and to which it always retreats if by accident it is found straggling in the hills, confiding no doubt in its wonderful fleetness. We also killed a few young geese, but as this game is small and very incompetent to the subsistence of the party, we have forbidden the men any longer to waste their ammunition on them. About four and a half miles above Gass's creek, the valley in which we have been travelling ceases, the high craggy cliffs again approach the river, which now enters or rather leaves what appears to be a second great chain of the Rocky mountains. About a mile after entering these hills or low mountains we passed a number of fine bold springs, which burst out near the edge of the river under the cliffs on the left, and furnished a fine freestone water: near these we met with two of the worst rapids we have seen since entering the mountains; a ridge of sharp pointed rocks stretching across the river, leaving but small and dangerous channels for the navigation. The cliffs are of a lighter colour than those we have already passed, and in the bed of the river is some limestone which is small and worn smooth, and seems to have been brought down by the current. We went about a mile further and encamped under a high bluff on the right opposite to a cliff of rocks, having made sixteen miles.

All these cliffs appeared to have been undermined by the water at some

period, and fallen down from the hills on their sides, the strata of rock sometimes lying with their edges upwards, others not detached from the hills are depressed obliquely on the side next the river as if they had sunk to fill up the cavity formed by the washing of the river.

In the open places among the rocky cliffs are two kinds of gooseberry, one yellow and the other red. The former species was observed for the first time near the Falls, the latter differs from it in no respect except in colour and in being of a larger size: both have a sweet flavour, and are rather indifferent fruit.

Friday, 26. We again found the current strong and the ripples frequent: these we were obliged to overcome by means of the cord and the pole, the oar being scarcely ever used except in crossing to take advantage of the shore. Within three and three quarter miles we passed seven small islands and reached the mouth of a large creek which empties itself in the centre of a bend on the left side: it is a bold running stream fifteen yards wide, and received the name of Howard creek after John P. Howard one of the party. One mile beyond it is a small run which falls in on the same side just above a rocky cliff. Here the mountains recede from the river, and the valley widens to the extent of several miles. The river now becomes crowded with islands of which we passed ten in the next thirteen and three quarter miles, then at the distance of eighteen miles we encamped on the left shore near a rock in the centre of a bend towards the left, and opposite to two more islands. This valley has wide low grounds covered with high grass, and in many with a fine turf of green sward. The soil of the highlands is thin and meagre, without any covering except a low sedge and a dry kind of grass which is almost as inconvenient as the prickly pear. The seeds of it are armed with a long twisted hard beard at their upper extremity, while the lower part is a sharp firm point, beset at its base with little stiff bristles, with the points in a direction contrary to the subulate point to which they answer as a barb. We see also another species of prickly pear. It is of a globular form, composed of an assemblage of little conic leaves springing from a common root to which their small points are attached as a common centre, and the base of the cone forms the apex of the leaf which is garnished with a circular range of sharp thorns like the cochineal plant, and quite as stiff and even more keen than those of the common flat-leaved species. Between the hills the river had been confined within one hundred and fifty or two hundred yards, but in the valley it widens to two hundred or two hundred and fifty yards, and sometimes is spread by its numerous islands to the distance of three quarters

of a mile. The banks are low, but the river never overflows them. On entering the valley we again saw the snow-clad mountains before us, but the appearance of the hills as well as of the timber near us is much as heretofore.

Finding Chaboneau unable to proceed captain Clarke left him with one of the men, and accompanied by the other went up the river about twelve miles to the top of a mountain. Here he had an extensive view of the river valley upwards and saw a large creek which flowed in on the right side. He however discovered no fresh sign of the Indians, and therefore determined to examine the middle branch and join us by the time we reached the forks: he descended the mountain by an Indian path which wound through a deep valley, and at length reached a fine cold spring. The day had been very warm, the path unshaded by timber, and his thirst was excessive; he was therefore tempted to drink: but although he took the precaution of previously wetting his head, feet, and hands, he soon found himself very unwell: he continued his route, and after resting with Chaboneau at his camp, resumed his march across the north fork near a large island. The first part was knee deep, but on the other side of the island the water came to their waists and was so rapid that Chaboneau was on the point of being swept away, and not being able to swim would have perished if captain Clarke had not rescued him. While crossing the island they killed two brown bear and saw great quantities of beaver. He then went on to a small river which falls into the north fork some miles above its junction with the two others: here, finding himself grow more unwell, he halted for the night at the distance of four miles from his last encampment.

Saturday, 27. We proceeded on but slowly, the current being still so rapid as to require the utmost exertions of us all to advance, and the men are loosing their strength fast in consequence of their constant efforts. At half a mile we passed an island, and a mile and a quarter further again entered a ridge of hills which now approach the river with cliffs apparently sinking like those of yesterday. They are composed of a solid limestone of a light lead colour when exposed to the air, though when freshly broken it is of a deep blue, and of an excellent quality and very fine grain. On these cliffs were numbers of the big-horn. At two and a half miles we reached the centre of a bend towards the south passing a small island, and at one mile and a quarter beyond this reached about nine in the morning the mouth of a river seventy yards wide, which falls in from the south-east. Here the country suddenly opens into extensive and beautiful meadows and plains, surrounded on every side with distant and lofty mountains. Captain Lewis went up this stream for about half a mile, and from the height of a limestone cliff could observe its course about seven miles, and

the three forks of the Missouri, of which this river is one. Its extreme point bore S. 65° E., and during the seven miles it passes through a green extensive meadow of fine grass dividing itself into several streams, the largest passing near the ridge of hills on which he stood. On the right side of the Missouri a high, wide, and extensive plain succeeds to this low meadow which reaches the hills. In the meadow a large spring rises about a quarter of a mile from this south-east fork, into which it discharges itself on the right side about four hundred paces from where he stood. Between the south-east and middle forks a distant range of snow-topped mountains spread from east to south above the irregular broken hills nearer to this spot: the middle and south-west forks unite at half a mile above the entrance of the south-east fork. The extreme point at which the former can be seen, bears S. 15° E., and at the distance of fourteen miles, where it turns to the right round the point of a high plain and disappears from the view. Its low grounds are several miles in width, forming a smooth and beautiful green meadow, and like the south-east fork it divides itself into several streams. Between these two forks and near their junction with that from the south-west, is a position admirably well calculated for a fort. It is a limestone rock of an oblong form, rising from the plain perpendicularly to the height of twenty-five feet on three of its sides; the fourth towards the middle fork being a gradual ascent and covered with a fine green sward, as is also the top which is level and contains about two acres. An extensive plain lies between the middle and south-west forks, the last of which after watering a country like that of the other two branches, disappears about twelve miles off, at a point bearing south 30° west. It is also more divided and serpentine in its course than the other two, and possesses more timber in its meadows. This timber consists almost exclusively of the narrow-leaved cottonwood, with an intermixture of box-alder and sweet-willow, the underbrush being thick and like that of the Missouri lower down. A range of high mountains partially covered with snow is seen at a considerable distance running from south to west, and nearly all around us are broken ridges of country like that below, through which those united streams appear to have forced their passage: after observing the country captain Lewis descended to breakfast. We then left the mouth of the south-east fork, which in honour of the secretary of the treasury we called Gallatin's river, and at the distance of half a mile reached the confluence of the south-west and middle branch of the Missouri. Here we found the letter from captain Clarke, and as we agreed with him that the direction of the south-west fork gave it a decided preference over the others, we ascended that branch of the river for a mile, and encamped in a level handsome plain on the left:

having advanced only seven miles. Here we resolved to wait the return of captain Clarke, and in the meantime make the necessary celestial observations, as this seems an essential point in the geography of the western world, and also to recruit the men and air the baggage. It was accordingly all unloaded and stowed away on shore. Near the three forks we saw many collections of the mud-nests of the small martin attached to the smooth faces of the limestone rock, where they were sheltered by projections of the rock above it: and in the meadows were numbers of the duck or mallard with their young, who are now nearly grown. The hunters returned towards evening with six deer, three otter and a muskrat; and had seen great numbers of antelopes, and much sign of the beaver and elk.

During all last night captain Clarke had a high fever and chills accompanied with great pain. He however pursued his route eight miles to the middle branch, where not finding any fresh Indian track he came down it and joined us about three o'clock, very much exhausted with fatigue and the violence of his fever. Believing himself bilious he took a dose of Rush's pills, which we have always found sovereign in such cases, and bathing the lower extremities in warm water.

We are now very anxious to see the Snake Indians. After advancing for several hundred miles into this wild and mountainous country, we may soon expect that the game will abandon us. With no information of the route we may be unable to find a passage across the mountains when we reach the head of the river, at least such a one as will lead us to the Columbia, and even were we so fortunate as to find a branch of that river, the timber which we have hitherto seen in these mountains does not promise us any fit to make canoes, so that our chief dependence is on meeting some tribe from whom we may procure horses. Our consolation is, that this south-west branch can scarcely head with any other river than the Columbia, and that if any nation of Indians can live in the mountains we are able to endure as much as they, and have even better means of procuring subsistence.

CHAP. XIII.

THE NAME OF THE MISSOURI CHANGED, AS THE RIVER NOW DIVIDES ITSELF INTO THREE FORKS, ONE OF WHICH IS CALLED AFTER JEFFERSON, THE OTHER MADISON, AND THE OTHER AFTER GALLATIN—THEIR GENERAL CHARACTER—THE PARTY ASCEND THE JEFFERSON BRANCH—DESCRIPTION OF THE RIVER PHILOSOPHY WHICH ENTERS INTO THE JEFFERSON—CAPTAIN LEWIS AND A SMALL PARTY GO IN ADVANCE IN SEARCH OF THE SHOSHONEES—DESCRIPTION OF THE COUNTRY, &c. BORDERING ON THE RIVER—CAPTAIN LEWIS STILL PRECEDING THE MAIN PARTY IN QUEST OF THE SHOSHONEES—A SINGULAR ACCIDENT WHICH PREVENTED CAPTAIN CLARKE FROM FOLLOWING CAPTAIN LEWIS'S ADVICE, AND ASCENDING THE MIDDLE FORK OF THE RIVER—DESCRIPTION OF PHILANTHROPY RIVER, ANOTHER STREAM RUNNING INTO THE JEFFERSON—CAPTAIN LEWIS AND A SMALL PARTY HAVING BEEN UNSUCCESSFUL IN THEIR FIRST ATTEMPT, SET OFF A SECOND TIME IN QUEST OF THE SHOSHONEES.

SUNDAY, July 28. CAPTAIN CLARKE continued very unwell during the night, but was somewhat relieved this morning. On examining the two streams it became difficult to decide which was the larger or the real Missouri; they are each ninety yards wide, and so perfectly similar in character and appearance that they seem to have been formed in the same mould. We were therefore induced to discontinue the name of Missouri, and gave to the south-west branch the name of Jefferson in honour of the president of the United States, and the projector of the enterprise: and called the middle branch Madison, after James Madison, secretary of state. These two, as well as Gallatin river, run with great velocity and throw out large bodies of water. Gallatin river is however the most rapid of the three, and though not quite as deep, yet navigable for a considerable distance. Madison river, though much less rapid than the Gallatin, is somewhat more rapid than the Jefferson; the beds of all of them are formed of smooth pebble and gravel, and the waters are perfectly transparent. The timber in the neighbour-

hood would be sufficient for the ordinary uses of an establishment, which, however, it would be advisable to build of brick, as the earth appears calculated for that purpose, and along the shores are some bars of fine pure sand. The greater part of the men, having yesterday put their deer skins in water, were this day engaged in dressing them, for the purpose of making clothing. The weather was very warm, the thermometer in the afternoon was at 90° above 0, and the mosquitoes more than usually inconvenient: we were, however, relieved from them by a high wind from the south-west, which came on at four o'clock, bringing a storm of thunder and lightning, attended by refreshing showers, which continued till after dark. In the evening the hunters returned with eight deer and two elk; and the party who had been sent up the Gallatin, reported that after passing the point, where it escaped from captain Lewis's view yesterday, it turned more towards the east, as far as they could discern the opening of the mountains, formed by the valley which bordered it. The low grounds were still wide but not so extensive as near its mouth, and though the stream is rapid and much divided by islands, it is still sufficiently deep for navigation with canoes. The low grounds, although not more than eight or nine feet above the water, seem never to be overflowed, except a part on the west side of the middle fork, which is stony and seems occasionally inundated, are furnished with great quantities of small fruit, such as currants and gooseberries: among the last of which is a black species, which we observe not only in the meadows but along the mountain rivulets. From the same root rise a number of stems to the height of five or six feet, some of them particularly branched and all reclining. The berry is attached by a long peduncle to the stem, from which they hang of a smooth ovate form, as large as the common garden gooseberry, and as black as jet, though the pulp is of a bright crimson colour. It is extremely acid: the form of the leaf resembles that of the common gooseberry, though larger. The stem is covered with very sharp thorns or briars: the grass too is very luxuriant and would yield fine hay in parcels of several acres. The sand rushes will grow in many places as high as a man's breast, and as thick as stalks of wheat; it would supply the best food during the winter to cattle of any trading or military post.

Sacajawea, our Indian woman, informs us that we are encamped on the precise spot where her countrymen, the Snake Indians, had their huts five years ago, when the Minnetarees of Knife river first came in sight of them, and from which they hastily retreated three miles up the Jefferson, and concealed themselves in the woods. The Minnetarees, however, pursued and attacked them, killed four men, as many women, and a number of boys; and made prisoners

of four other boys, and all the females, of whom Sacajawea was one: she does not, however, show any distress at these recollections, nor any joy at the prospect of being restored to her country; for she seems to possess the folly or the philosophy of not suffering her feelings to extend beyond the anxiety of having plenty to eat and a few trinkets to wear.

Monday, 29. This morning the hunters brought in some fat deer of the long-tailed red kind, which are quite as large as those of the United States, and are, indeed, the only kind we have found at this place: there are numbers of the sand-hill cranes feeding in the meadows; we caught a young one of the same colour as the red deer, which though it had nearly attained its full growth could not fly; it is very fierce and strikes a severe blow with its beak. The kingfisher has become quite common on this side of the Falls: but we have seen none of the summer duck since leaving that place. The mallard duck, which we saw for the first time on the 20th instant, with their young, are now abundant, though they do not breed on the Missouri, below the mountains. The small birds already described are also abundant in the plains; here too, are great quantities of grass-hoppers or crickets; and among other animals, a large ant with a reddish brown body and legs, and a black head and abdomen, who build little cones of gravel, ten or twelve inches high, without a mixture of sticks, and but little earth. In the river we see a great abundance of fish, but we cannot tempt them to bite by any thing on our hooks. The whole party have been engaged in dressing skins, and making them into moccasins and leggings. Captain Clarke's fever has almost left him, but he still remains very languid and has a general soreness in his limbs. The latitude of our camp, as the mean of two observations of the meridian altitude of the sun's lower limb with octant by back observation, is N. $45^{\circ} 24' 8'' 5'''$.

Tuesday, 30. Captain Clarke was this morning much restored; and, therefore, having made all the observations necessary to fix the longitude, we re-loaded our canoes, and began to ascend Jefferson river. The river now becomes very crooked, and forms bends on each side; the current too is rapid, and cut into a great number of channels, and sometimes shoals, the beds of which consist of coarse gravel. The islands are unusually numerous: on the right are high plains occasionally forming cliffs of rocks and hills; while the left was an extensive low ground and prairie intersected by a number of bayous or channels falling into the river. Captain Lewis, who had walked through it with Chaboneau, his wife, and two invalids, joined us at dinner, a few miles above our camp. Here the Indian woman said was the place where she had been made prisoner. The men being too few to contend with the Minnetarees,

mounted their horses, and fled as soon as the attack began. The women and children dispersed, and Sacajawea as she was crossing at a shoal place, was overtaken in the middle of the river by her pursuers. As we proceeded, the low grounds were covered with cottonwood and a thick underbrush, and on both sides of the river, except where the high hills prevented it, the ground was divided by bayous, which are dammed up by the beaver, which are very numerous here. We made twelve and a quarter miles, and encamped on the north side. Captain Lewis proceeded after dinner, through an extensive low ground of timber and meadow land intermixed; but the bayous were so obstructed by beaver dams, that in order to avoid them he directed his course towards the high plain on the right. This he gained with some difficulty, after wading up to his waist through the mud and water of a number of beaver dams. When he desired to rejoin the canoes he found the underbrush so thick, and the river so crooked, that this, joined to the difficulty of passing the beaver dams, induced him to go on and endeavour to intercept the river at some point where it might be more collected into one channel and approach nearer to the high plain. He arrived at the bank about sunset, having gone only six miles in a direct course from the canoes: but he saw no traces of the men, nor did he receive any answer to his shouts nor the firing of his gun. It was now nearly dark; a duck lighted near him and he shot it. He then went to the head of a small island where he found some driftwood, which enabled him to cook his duck for supper, and he laid down to sleep on some willow brush. The night was cool, but the driftwood gave him a good fire, and he suffered no inconvenience except from the musquitoes.

Wednesday, 31. The next morning he waited till after seven o'clock, when he became uneasy lest we should have gone beyond his camp last evening and determined to follow us. Just as he had set out with this intention, he saw one of the party in advance of the canoes; although our camp was only two miles below him, in a straight line, we could not reach him sooner, in consequence of the rapidity of the water and the circuitous course of the river. We halted for breakfast, after which captain Lewis continued his route. At the distance of one mile from our encampment we passed the principal entrance of a stream on the left, which rises in the snowy mountains to the south-west, between Jefferson and Madison rivers, and discharges itself by seven mouths, five below, and one three miles above this, which is the largest, and about thirty yards wide: we called it Philosophy river. The water of it is abundant and perfectly clear, and the bed like that of the Jefferson consists of pebble and gravel. There is some timber in the bottoms of the river, and vast numbers of otter and

beaver, which build on its smaller mouths and the bayous of its neighbourhood. The Jefferson continues as yesterday, shoaly and rapid, but as the islands though numerous are small, it is however more collected into one current than it was below, and is from ninety to one hundred and twenty yards in width. The low ground has a fertile soil of rich black loam, and contains a considerable quantity of timber, with the bullrush and cattail flag very abundant in the moist parts, while the drier situations are covered with fine grass, tansy, thistles, onions, and flax. The uplands are barren, and without timber: the soil is a light yellow clay intermixed with small smooth pebble and gravel, and the only produce is the prickly-pear, the sedge, and the bearded grass, which is as dry and inflammable as tinder. As we proceeded the low grounds became narrower, and the timber more scarce, till at the distance of ten miles the high hills approach and overhang the river on both sides, forming cliffs of a hard black granite, like almost all those below the limestone cliffs at the three forks of the Missouri: they continue so for a mile and three quarters, where we came to a point of rock on the right side, at which place the hills again retire, and the valley widens to the distance of a mile and a half. Within the next five miles we passed four islands, and reached the foot of a mountain in a bend of the river to the left: from this place we went a mile and a quarter to the entrance of a small run discharging itself on the left, and encamped on an island just above it, after making seventeen and three quarter miles. We observe some pine on the hills on both sides of our encampment, which are very lofty. The only game which we have seen are one bighorn, a few antelopes, deer, and one brown bear, which escaped from our pursuit. Nothing was, however, killed to-day, nor have we had any fresh meat except one beaver for the last two days, so that we are now reduced to an unusual situation, for we have hitherto always had a great abundance of flesh.

Thursday, August 1. We left our encampment early, and at the distance of a mile, reached a point of rocks on the left side, where the river passes through perpendicular cliffs. Two and three quarter miles further we halted for breakfast under a cedar tree in a bend to the right: here as had been previously arranged, captain Lewis left us, with sergeant Gass, Chaboneau, and Drewyer, intending to go on in advance in search of the Shoshonees. He began his route along the north side of the river over a high range of mountains, as captain Clarke who ascended them on the 26th had observed from them a large valley spreading to the north of west, and concluded that on leaving the mountain the river took that direction; but when he reached that valley, captain Lewis found it to be the passage of a large creek falling just above the mountain into

the Jefferson, which bears to the south-west. On discovering his error, he bent his course towards that river, which he reached about two in the afternoon, very much exhausted with heat and thirst. The mountains were very bare of timber, and the route lay along the steep and narrow hollows of the mountain, exposed to the mid-day sun, without air, or shade, or water. Just as he arrived there a flock of elk passed, and they killed two of them, on which they made their dinner, and left the rest on the shore for the party in the canoes. After dinner they resumed their march, and encamped on the north side of the river, after making seventeen miles; in crossing the mountains captain Lewis saw a flock of the black or dark brown pheasant, of which he killed one. This bird is one third larger than the common pheasant of the Atlantic States; its form is much the same. The male has not however the tufts of long black feathers on the sides of the neck so conspicuous in the Atlantic pheasant, and both sexes are booted nearly to the toes. The colour is a uniform dark brown with a small mixture of yellow or yellowish brown specks on some of the feathers, particularly those of the tail, though the extremities of these are perfectly black for about an inch. The eye is nearly black, and the iris has a small dash of yellowish brown; the feathers of the tail are somewhat longer than those of our pheasant, but the same in number, eighteen, and nearly equal in size, except that those of the middle are somewhat the longest; their flesh is white and agreeably flavoured.

He also saw among the scattered pine near the top of the mountain, a blue bird about the size of a robin, but in action and form something like a jay; it is constantly in motion, hopping from spray to spray, and its note which is loud and frequent, is, as far as letters can represent it, char ah! char ah! char ah!

After breakfast we proceeded on: at the distance of two and a quarter miles the river enters a high mountain, which forms rugged cliffs of nearly perpendicular rocks. These are of a black granite at the lower part, and the upper consists of a light coloured freestone; they continue from the point of rocks close to the river for nine miles, which we passed before breakfast, during which the current is very strong. At nine and a quarter miles we passed an island, and a rapid with a fall of six feet, and reached the entrance of a large creek on the left side. In passing this place the towline of one of the canoes broke just at the shoot of the rapids; it swung on the rocks and had nearly upset. To the creek as well as the rapid we gave the name of Frazier, after Robert Frazier, one of the party: here the country opens into a beautiful valley from six to eight miles in width: the river then becomes crooked and crowded with islands; its lowgrounds wide and fertile, but though covered with fine grass from nine inches to two feet high, possesses but a small proportion of timber, and that consists

almost entirely of a few narrow-leaved cottonwood distributed along the verge of the river. The soil of the plain is tolerably fertile, and consists of a black or dark yellow loam. It gradually ascends on each side to the bases of two ranges of high mountains which lie parallel to the river; the tops of them are yet in part covered with snow, and while in the valley we are nearly suffocated with heat during the day, and at night the air is so cold that two blankets are not more than sufficient covering. In passing through the hills we observed some large cedar trees, and some juniper also. From Frazier's creek we went three and three-quarter miles, and encamped on the left side, having come thirteen miles. Directly opposite our camp is a large creek which we call Field's creek, from Reuben Fields, one of our men. Soon after we halted two of the hunters went out and returned with five deer, which, with one bighorn, we killed in coming through the mountain, on which we dined; and the elk left by captain Lewis. We were again well supplied with fresh meat. In the course of the day we saw a brown bear, but were not able to shoot him.

Friday, August 2. Captain Lewis, who slept in the valley a few miles above us, resumed his journey early, and after making five miles, and finding that the river still bore to the south, determined to cross it in hopes of shortening the route: for the first time therefore he waded across it, although there are probably many places above the Falls where it might be attempted with equal safety. The river was about ninety yards wide, the current rapid, and about waist deep: the bottom formed of smooth pebble with a small mixture of coarse gravel. He then continued along the left bank of the river till sunset and encamped, after travelling twenty-four miles. He met no fresh tracks of Indians. Throughout the valley are scattered the bones and excrement of the buffalo of an old date, but there seems no hope of meeting the animals themselves in the mountains: he saw an abundance of deer and antelope, and many tracks of elk and bear. Having killed two deer they feasted sumptuously, with a dessert of currants of different colours; two species of red, others yellow, deep purple, and black: to these were added black gooseberries and deep purple serviceberries, somewhat larger than ours, from which it differs also in colour, size, and the superior excellence of its flavour. In the low grounds of the river were many beaver-dams formed of willow brush, mud, and gravel, so closely interwoven that they resist the water perfectly: some of them were five feet high and overflowed several acres of land.

In the meantime we proceeded on slowly, the current being so strong as to require the utmost exertions of the men to make any advance, even with the aid of the cord and pole, the wind being from the north-west. The river is full of large and small islands, and the plain cut by great numbers of bayous or channels,

in which are multitudes of beaver. In the course of the day we passed some villages of barking squirrels: we saw several rattlesnakes in the plain; young ducks, both of the duck-on-mallard and redheaded fishing-duck species; some geese; also the black woodpecker, and a large herd of elk. The channel, current, banks, and general appearance of the river, are like that of yesterday. At fourteen and three-quarter miles we reached a rapid creek or bayou, about thirty yards wide, to which we gave the name of Birth creek. After making seventeen miles we halted in a smooth plain in a bend towards the left.

Saturday, 3. Captain Lewis continued his course along the river through the valley, which continued much as it was yesterday, except that it now widens to nearly twelve miles: the plains too are more broken and have some scattered pine near the mountains, where they rise higher than hitherto. In the level parts of the plains, and the river bottoms, there is no timber except small cotton-wood near the margin, and an undergrowth of narrow-leaved willow, small honeysuckle, rosebushes, currants, serviceberry, and gooseberry, and a little of a small species of birch; it is a finely indented oval, of a small size and a deep green colour; the stem is simple, ascending and branching, and seldom rises higher than ten or twelve feet. The mountains continue high on each side of the valley, but their only covering is a small species of pitch-pine with a short leaf, growing on the lower and middle regions, while for some distance below the snowy tops, there is neither timber nor herbage of any kind. About eleven o'clock Drewyer killed a doe on which they breakfasted, and after resting two hours continued till night, when they reached the river near a low ground more extensive than usual. From the appearance of the timber captain Lewis supposed that the river forked above him, and therefore encamped with an intention of examining it more particularly in the morning. He had now made twenty-three miles, the latter part of which was for eight miles through a high plain, covered with prickly pears and bearded grass, which rendered the walking very inconvenient; but even this was better than the river bottoms we crossed in the evening, which, though apparently level, were formed into deep holes, as if they had been rooted up by hogs, and the holes were so covered with thick grass, that they were in danger of falling at every step. Some parts of these low grounds, however, contain turf or peat of an excellent quality for many feet deep apparently, as well as the mineral salts, which we have already mentioned on the Missouri. They saw many deer, antelopes, ducks, geese, some beaver, and great traces of their work, and the small birds and curlews as usual. The only fish which they observed in this part of the river is the trout, and a species of white

fish, with a remarkably long small mouth, which one of our men recognises as the fish called in the eastern states the bottlenose.

On setting out with the canoes we found the river as usual much crowded with islands, the current more rapid as well as shallower, so that in many places they were obliged to man the canoes double, and drag them over the stone and gravel of the channel. Soon after we set off captain Clarke, who was walking on shore, observed a fresh track, which he knew to be that of an Indian from the large toes being turned inwards, and following it found that it led to the point of a hill, from which our camp of last night could be seen. This circumstance strengthened the belief that some Indian had strayed thither, and had run off alarmed at the sight of us. At two and a quarter miles, is a small creek in a bend towards the right, which runs down from the mountains at a little distance; we called it Panther creek, from an animal of that kind killed by Reuben Fields at its mouth. It is precisely the same animal common to the western parts of the United States, and measured seven and a half feet from the nose to the extremity of the tail. Six and three-quarter miles beyond this stream is another on the left, formed by the drains which convey the melted snows from a mountain near it, under which the river passes, leaving the low grounds on the right side, and making several bends in its course. On this stream are many large beaver dams. One mile above it is a small run on the left, and after leaving which begins a very bad rapid, where the bed of the river is formed of solid rock: this we passed in the course of a mile, and encamped on the lower point of an island. Our journey had been only thirteen miles, but the badness of the river made it very laborious, as the men were compelled to be in the water during the greater part of the day. We saw only deer, antelopes, and the common birds of the country.

Saturday, 4. This morning captain Lewis proceeded early, and after going south-east by east for four miles, reached a bold running creek, twelve yards wide, with clear cold water, furnished apparently by four drains from the snowy mountains on the left: after passing this creek he changed his direction to south-east, and leaving the valley in which he had travelled for the two last days, entered another which bore east. At the distance of three miles on this course he passed a handsome little river, about thirty yards wide, which winds through the valley: the current is not rapid nor the water very clear, but it affords a considerable quantity of water, and appears as if it might be navigable for some miles. The banks are low, and the bed formed of stone and gravel. He now changed his route to south-west, and passing a high plain which separates

the vallies, returned to the more southern, or that which he had left: in passing this he found a river about forty-five yards wide, the water of which has a whitish blue tinge, with a gentle current, and a gravelly bottom. This he waded and found it waist deep. He then continued down it, till, at the distance of three-quarters of a mile, he saw the entrance of the small river he had just passed; as he went on two miles lower down, he found the mouth of the creek he had seen in the morning. Proceeding further on three miles, he arrived at the junction of this river with another which rises from the south-west, runs through the south valley about twelve miles before it forms its junction, where it is fifty yards wide: we now found that our camp of last night was about a mile and a half above the entrance of this large river, on the right side. This is a bold, rapid, clear stream, but its bed is so much obstructed by gravelly bars, and subdivided by islands, that the navigation must be very insecure, if not impracticable. The other, or middle stream, has about two-thirds its quantity of water, and is more gentle, and may be safely navigated. As far as it could be observed, its course was about south-west, but the opening of the valley induced him to believe that farther above it turned more towards the west. Its water is more turbid and warmer than that of the other branch, whence it may be presumed to have its sources at a greater distance in the mountains, and to pass through a more open country. Under this impression he left a note recommending to captain Clarke the middle fork, and then continued his course along the right side of the other, or more rapid branch. After travelling twenty-three miles he arrived near a place where the river leaves the valley and enters the mountains. Here he encamped for the night. The country he passed is like that of the rest of this valley, though there is more timber in this part on the rapid fork than there has been on the river in the same extent since we entered it; for on some parts of the valley the Indians seem to have destroyed a great proportion of the little timber there was, by setting fire to the bottoms. He saw some antelopes, deer, cranes, geese, and ducks of the two species common to this country, though the summer duck has ceased to appear, nor does it seem to be an inhabitant of this part of the river.

We proceeded soon after sunrise: the first five miles we passed four bends on the left, and several bayous on both sides. At eight o'clock we stopped to breakfast, and found the note captain Lewis had written on the 2d instant. During the next four miles we passed three small bends of the river to the right, two small islands, and two bayous on the same side. Here we reached a bluff on the left; our next course was six miles to our encampment. In this course we met six circular bends on the right, and several small bayous, and

halted for the night in a low ground of cottonwood on the right. Our day's journey, though only fifteen miles in length, was very fatiguing. The river is still rapid and the water though clear is very much obstructed by shoals or ripples at every two or three hundred yards: at all these places we are obliged to drag the canoes over the stones, as there is not a sufficient depth of water to float them, and in the other parts the current obliges us to have recourse to the cord. But as the brushwood on the banks will not permit us to walk on shore, we are under the necessity of wading through the river as we drag the boats. This soon makes our feet tender, and sometimes occasions severe falls over the slippery stones; and the men by being constantly wet are becoming more feeble. In the course of the day the hunters killed two deer, some geese and ducks, and the party saw antelopes, cranes, beaver, and otter.

Monday, 5. This morning Chaboneau complained of being unable to march far to-day, and captain Lewis therefore ordered him and sergeant Gass to pass the rapid river and proceed through the level low ground, to a point of high timber on the middle fork, seven miles distant, and wait his return. He then went along the north side of the rapid river about four miles, where he waded it, and found it so rapid and shallow that it would be impossible to navigate it. He continued along the left side for a mile and a half, when the mountains came close on the river, and rise to a considerable height with a partial covering of snow. From this place the course of the river was to the east of north. After ascending with some difficulty a high point of the mountain, he had a pleasing view of the valley he had passed, and which continued for about twenty miles further on each side of the middle fork, which then seemed to enter the mountains, and was lost to the view. In that direction, however, the hills which terminate the valley, are much lower than those along either of the other forks, particularly the rapid one, where they continue rising in ranges above each other as far as the eye could reach. The general course too of the middle fork, as well as that of the gap which it forms on entering the mountains, is considerably to the south of west; circumstances which gave a decided preference to this branch as our future route. Captain Lewis now descended the mountain, and crossed over to the middle fork, about five miles distant, and found it still perfectly navigable. There is a very large and plain Indian road leading up it, but it has at present no tracks, except those of horses which seem to have used it last spring. The river here made a great bend to the south-east, and he therefore directed his course, as well as he could, to the spot where he had ordered Chaboneau and Gass to repair, and struck the river about three miles above their camp. It was now dark, and he, therefore, was obliged to make his way through

the thick brush of the pulpy-leaved thorn and the prickly pear, for two hours before he reached their camp. Here he was fortunate enough to find the remains of some meat, which was his only food during the march of twenty-five miles to-day. He had seen no game of any sort except a few antelopes who were very shy. The soil of the plains is a meagre clay, of a light yellow colour, intermixed with a large proportion of gravel, and producing nothing but twisted or bearded grass, sedge and prickly pears. The drier parts of the low grounds are also more indifferent in point of soil than those farther down the river, and although they have but little grass, are covered with southern wood, pulpy-leaved thorn, and prickly pears, while the moist parts are fertile, and supplied with fine grass and sandrushes.

We passed within the first four and a quarter miles three small islands, and the same number of bad rapids. At the distance of three quarters of a mile is another rapid of difficult passage: three miles and three quarters beyond this are the forks of the river, in reaching which we had two islands and several bayous on different sides to pass. Here we had come nine miles and a quarter. The river was straighter and more rapid than yesterday, the labour of the navigation proportionally increased, and we therefore proceeded very slowly, as the feet of several of the men were swollen, and all were languid with fatigue. We arrived at the forks about four o'clock, but unluckily captain Lewis's note had been left on a green pole which the beaver had cut down and carried off with the note, an accident which deprived us of all information as to the character of the two branches of the river. Observing therefore that the north-west fork was most in our direction, and contained as much water as the other, we ascended it: we found it extremely rapid, and its waters were scattered in such a manner, that for a quarter of a mile we were forced to cut a passage through the willow brush that leaned over the little channels and united at the top. After going up it for a mile we encamped on an island which had been overflowed, and was still so wet that we were compelled to make beds of brush to keep ourselves out of the mud. Our provision consisted of two deer which had been killed in the morning.

Tuesday, 6. We proceeded up the north-west fork, which we found still very rapid, and divided by several islands, while the plains near it were intersected by bayous. After passing with much difficulty over stones and rapids, we reached a bluff on the right, at the distance of nine miles, our general course south 30° west, and halted for breakfast. Here we were joined by Drewyer, who informed us of the state of the two rivers and of captain Lewis's note, and we immediately began to descend the river in order to take the other branch.

On going down one of the canoes upset, and two others filled with water, by which all the baggage was wetted, and several articles irrecoverably lost. As one of them swung round in a rapid current, Whitehouse was thrown out of her, and whilst down the canoe passed over him, and had the water been two inches shallower would have crushed him to pieces; but he escaped with a severe bruise of his leg. In order to repair these misfortunes we hastened to the forks, where we were joined by captain Lewis, and then passed over to the left side opposite to the entrance of the rapid fork, and encamped on a large gravelly bar, near which there was plenty of wood. Here we opened and exposed to dry all the articles which had suffered from the water; none of them were completely spoiled except a small keg of powder; the rest of the powder, which was distributed in the different canoes was quite safe, although it had been under the water upwards of an hour. The air is indeed so pure and dry that any wood-work immediately shrinks unless it is kept filled with water; but we had placed our powder in small canisters of lead, each containing powder enough for the canister when melted into bullets, and secured with cork and wax, which answered our purpose perfectly.

Captain Lewis had risen very early, and having nothing to eat, sent out Drewyer to the woodland on the left in search of a deer, and directed sergeant Gass to keep along the middle branch to meet us if we were ascending it. He then set off with Chaboneau towards the forks, but five miles above them, hearing us on the left, struck the river as we were descending, and came on board at the forks.

In the evening we killed three deer and four elk, which furnished us once more with a plentiful supply of meat. Shannon, the same man who was lost before for fifteen days, was sent out this morning to hunt, up the north-west fork: when we decided on returning, Drewyer was directed to go in quest of him, but he returned with information that he had gone several miles up the river without being able to find Shannon. We now had the trumpet sounded, and fired several guns, but he did not return, and we fear he is again lost.

Wednesday, 7. We remained here this morning for the purpose of making some celestial observations, and also in order to refresh the men, and complete the drying of the baggage. We obtained a meridian altitude which gave the latitude of our camp as north $45^{\circ} 2' 43'' 8'''$. We were now completely satisfied that the middle branch was the most navigable, and the true continuation of the Jefferson. The north-west fork seems to be the drain of the melting snows of the mountains, its course cannot be so long as the other branch, and although it contains now as great a quantity of water, yet the water has obviously overflowed

the old bed, and spread into channels which leave the low grounds covered with young grass, resembling that of the adjoining lands, which are not inundated; whence we readily infer that the supply is more precarious than that of the other branch, the waters of which though more gentle are more constant. This north-west fork we called Wisdom river.

As soon as the baggage was dried, it was reloaded on board the boats, but we now found it so much diminished, that we would be able to proceed with one canoe less. We therefore hauled up the superfluous one into a thicket of brush where we secured her against being swept away by the high tide. At one o'clock all set out, except captain Lewis, who remained till the evening in order to complete the observation of equal altitudes: we passed several bends of the river both to the right and left, as well as a number of bayous on both sides, and made seven miles by water, though the distance by land is only three. We then encamped on a creek which rises in a high mountain to the north-east, and after passing through an open plain for several miles, discharges itself on the left, where it is a bold running stream twelve yards wide. We called it Turf creek, from the number of bogs and the quantity of turf on its waters. In the course of the afternoon there fell a shower of rain attended with thunder and lightning, which lasted about forty minutes, and the weather remained so cloudy all night that we were unable to take any lunar observations. Uneasy about Shannon, we sent R. Fields in search of him this morning, but we have as yet no intelligence of either of them. Our only game to-day was one deer.

Thursday, 8. There was a heavy dew this morning. Having left one of the canoes, there are now more men to spare for the chase: and four were sent out at an early hour, after which we proceeded. We made five miles by water along two islands and several bayous, but as the river formed seven different bends towards the left, the distance by land was only two miles south of our encampment. At the end of that course we reached the upper principal entrance of a stream which we called Philanthropy river. This river empties itself into the Jefferson on the south-east side, by two channels a short distance from each other: from its size and its south-eastern course, we presume that it rises in the Rocky mountains near the sources of the Madison. It is thirty yards wide at its entrance, has a very gentle current and is navigable for some distance. One mile above this river we passed an island, a second at the distance of six miles further, during which the river makes a considerable bend to the east. Reuben Fields returned about noon with information that he had gone up Wisdom river till its entrance into the mountains, but could find nothing of Shannon. We made seven miles beyond the last island, and after passing some small bayous,

encamped under a few high trees on the left, at the distance of fourteen miles above Philanthropy river by water, though only six by land. The river has in fact become so very crooked that although by means of the pole, which we now use constantly, we make a considerable distance, yet being obliged to follow its windings, at the end of the day, we find ourselves very little advanced on our general course. It forms itself into small circular bends, which are so numerous that within the last fourteen miles we passed thirty-five of them, all inclining towards the right: it is however much more gentle and deep than below Wisdom river, and its general width is from thirty-five to forty-five yards. The general appearance of the surrounding country is that of a valley five or six miles wide, enclosed between two high mountains. The bottom is rich, with some small timber on the islands and along the river, which consists rather of underbrush, and a few cottonwood, birch, and willow-trees. The high grounds have some scattered pine, which just relieve the general nakedness of the hills and the plain, where there is nothing except grass. Along the bottoms we saw to-day a considerable quantity of the buffalo clover, the sunflower, flax, green sward, thistle and several species of rye grass, some of which rise to the height of three or four feet. There is also a grass with a soft smooth leaf which rises about three feet high, and bears its seed very much like the timothy, but it does not grow luxuriantly nor would it apparently answer so well in our meadows as that plant. We preserved some of its seed, which are now ripe, in order to make the experiment. Our game consisted of deer and antelope, and we saw a number of geese and ducks just beginning to fly, and some cranes. Among the inferior animals we have an abundance of the large biting or hare fly, of which there are two species, one black, the other smaller and brown, except the head, which is green. The green or blowing flies unite with them in swarms to attack us, and seem to have relieved the eye-gnats who have now disappeared. The mosquitoes too are in large quantities, but not so troublesome as they were below. Through the valley are scattered bogs, and some very good turf, the earth of which the mud is composed is of a white or bluish white colour, and seems to be argillaceous. On all the three rivers, but particularly on the Philanthropy, are immense quantities of beaver, otter and muskrat. At our camp there was an abundance of rosebushes and briars, but so little timber that we were obliged to use willow brush for fuel. The night was again cloudy which prevented the lunar observations.

On our right is the point of a high plain, which our Indian woman recognizes as the place called the Beaver's-head, from a supposed resemblance to that object. This she says is not far from the summer retreat of her countrymen,

which is on a river beyond the mountains, and running to the west. She is therefore certain that we shall meet them either on this river, or on that immediately west of its source, which, judging from its present size, cannot be far distant. Persuaded of the absolute necessity of procuring horses to cross the mountains, it was determined that one of us should proceed in the morning to the head of the river, and penetrate the mountains till he found the Shoshonees or some other nation who could assist us in transporting our baggage, the greater part of which we shall be compelled to leave without the aid of horses.

Friday, 9. The morning was fair and fine. We set off early, and proceeded on very well, though there were more rapids in the river than yesterday. At eight o'clock we halted for breakfast, part of which consisted of two fine geese killed before we stopped. Here we were joined by Shannon for whose safety we had been so uneasy. The day on which he left us on his way up Wisdom river, after hunting for some time and not seeing the party arrive, he returned to the place where he had left us. Not finding us there he supposed we had passed him, and he therefore marched up the river during all the next day, when he was convinced that we had not gone on, as the river was no longer navigable. He now followed the course of the river down to the forks, and then took the branch which we are pursuing. During the three days of his absence, he had been much wearied with his march, but had lived plentifully, and brought the skins of three deer. As far as he had ascended Wisdom river it kept its course obliquely down towards the Jefferson. Immediately after breakfast, captain Lewis took Drewyer, Shields and M'Neal, and slinging their knapsacks they set out with a resolution to meet some nation of Indians before they returned, however long they might be separated from the party. He directed his course across the low ground to the plain on the right, leaving the Beaver's-head about two miles to the left. After walking eight miles to the river, which they waded, they went on to a commanding point from which he saw the place at which it enters the mountain, but as the distance would not permit his reaching it this evening, he descended towards the river, and after travelling eight miles further, encamped for the evening some miles below the mountain. They passed before reaching their camp a handsome little stream formed by some large springs which rise in the wide bottom on the left side of the river. In their way they killed two antelopes, and took with them enough of the meat for their supper and breakfast the next morning.

In the meantime we proceeded, and in the course of eleven miles from our

last encampment passed two small islands, sixteen short round bends in the river, and halted in a bend towards the right where we dined. The river increases in rapidity as we advance, and is so crooked that the eleven miles, which have cost us so much labour, only bring us four miles in a direct line. The weather became overcast towards evening, and we experienced a slight shower attended with thunder and lightning. The three hunters who were sent out killed only two antelopes; game of every kind being scarce.

Saturday, 10. Captain Lewis continued his route at an early hour through the wide bottom along the left bank of the river. At about five miles he passed a large creek, and then fell into an Indian road leading towards the point where the river entered the mountain. This he followed till he reached a high perpendicular cliff of rocks where the river makes its passage through the hills, and which he called the Rattlesnake cliff, from the number of that animal which he saw there: here he kindled a fire and waited the return of Drewyer, who had been sent out on the way to kill a deer: he came back about noon with the skin of three deer and the flesh of one of the best of them. After a hasty dinner they returned to the Indian road which they had left for a short distance to see the cliff. It led them sometimes over the hills, sometimes in the narrow bottoms of the river, till at the distance of fifteen miles from the Rattlesnake cliffs they reached a handsome open and level valley, where the river divided into two nearly equal branches. The mountains over which they passed were not very high, but are rugged and continue close to the river side. The river, which before it enters the mountain was rapid, rocky, very crooked, much divided by islands, and shallow, now becomes more direct in its course as it is hemmed in by the hills, and has not so many bends nor islands, but becomes more rapid and rocky, and continues as shallow. On examining the two branches of the river it was evident that neither of them was navigable further. The road forked with the river; and captain Lewis therefore sent a man up each of them for a short distance, in order that by comparing their respective information he might be able to take that which seemed to have been most used this spring. From their account he resolved to choose that which led along the south-west branch of the river which was rather the smaller of the two: he accordingly wrote a note to captain Clarke informing him of the route, and recommending his staying with the party at the forks till he should return: this he fixed on a dry willow pole at the forks of the river, and then proceeded up the south-west branch; but after going a mile and a half the road became scarcely distinguishable, and the tracks of the horses which he had followed along the Jefferson were no longer

seen. Captain Lewis therefore returned to examine the other road himself, and found that the horses had in fact passed along the western or right fork, which had the additional recommendation of being larger than the other.

This road he concluded to take, and therefore sent back Drewyer to the forks with a second letter to captain Clarke apprising him of the change, and then proceeded on. The valley of the west fork through which he now passed, bears a little to the north of west, and is confined within the space of about a mile in width, by rough mountains and steep cliffs of rock. At the distance of four and a half miles it opens into a beautiful and extensive plain about ten miles long and five or six in width: this is surrounded on all sides by higher rolling or waving country, intersected by several little rivulets from the mountains, each bordered by its wide meadows. The whole prospect is bounded by these mountains, which nearly surround it, so as to form a beautiful cove about sixteen or eighteen miles in diameter. On entering this cove the river bends to the north-west, and bathes the foot of the hills to the right. At this place they halted for the night on the right side of the river, and having lighted a fire of dry willow brush, the only fuel which the country affords, supped on a deer. They had travelled to-day thirty miles by estimate: that is ten to the Rattlesnake cliff, fifteen to the forks of Jefferson river, and five to their encampment. In this cove some parts of the low grounds are tolerably fertile, but much the greater proportion is covered with prickly pear, sedge, twisted grass, the pulpy-leaved thorn, southern-wood, and wild sage, and like the uplands have a very inferior soil. These last have little more than the prickly pear and the twisted or bearded grass, nor are there in the whole cove more than three or four cotton-wood trees, and those are small. At the apparent extremity of the bottom above, and about ten miles to the westward, are two perpendicular cliffs rising to a considerable height on each side of the river, and at this distance seem like a gate.

In the meantime we proceeded at sunrise, and found the river not so rapid as yesterday, though more narrow and still very crooked, and so shallow that we were obliged to drag the canoes over many ripples in the course of the day. At six and a half miles we had passed eight bends on the north, and two small bayous on the left, and came to what the Indians call the Beaver's-head, a steep rocky cliff about one hundred and fifty feet high, near the right side of the river. Opposite to this at three hundred yards from the water is a low cliff about fifty feet in height, which forms the extremity of a spur of the mountain about four miles distant on the left. At four o'clock we were overtaken by a heavy shower of rain, attended with thunder, lightning and hail. The party

were defended from the hail by covering themselves with willow bushes, but they got completely wet, and in this situation, as soon as the rain ceased, continued till we encamped. This we did at a low bluff on the left, after passing in the course of six and a half miles, four islands and eighteen bends on the right, and a low bluff and several bayous on the same side. We had now come thirteen miles, yet were only four on our route towards the mountains. The game seems to be declining, for our hunters procured only a single deer, though we found another for us that had been killed three days before by one of the hunters during an excursion, and left for us on the river.

CHAP. XLV

CAPTAIN LEWIS PROCEEDED BEHIND THE MAIN BODY IN SEARCH OF THE SHOONERS—HIS LITTLE SUCCESS ON THE FIRST INTERVIEW—THEIR HOSTILITY WITH CAPTAIN LEWIS AT LENGTH DISCOVERED THE SOURCE OF THE MISSOURI—CAPTAIN CLARK WITH THE MAIN BODY STILL EMPLOYED IN ASCENDING THE MISSOURI ON TUESDAY RIVER—CAPTAIN LEWIS'S SECOND INTERVIEW WITH THE SHOONERS—ATTENDED WITH SUCCESS—THE INTERESTING CEREMONIES OF HIS FIRST INTRODUCTION TO THE NATIVES—DETAILED AT LARGE—THEIR HOSTILITY—THEIR MODE OF HUNTING THE ANTELOPE—THE DIFFICULTIES ENCOUNTERED BY CAPTAIN CLARK AND THE MAIN BODY IN ASCENDING THE RIVER—THE SUSPICIONS RETAINED BY CAPTAIN LEWIS BY THE SHOONERS, AND HIS MODE OF ALLAYING THEM—THE RAVENOUS APPETITE OF THE SAVAGES ILLUSTRATED BY A SINGULAR ADVENTURE—THE INDIANS STILL JEALOUS, AND THE GREAT FAINS TAKEN BY CAPTAIN LEWIS TO RECOVER THEIR CONFIDENCE—CAPTAIN CLARK ARRIVES WITH THE MAIN BODY EXHAUSTED BY THE DIFFICULTIES WHICH THEY UNDERWENT.

SUNDAY, August 11. CAPTAIN LEWIS again proceeded on early, but had the mortification to find that the track which he followed yesterday soon disappeared. He determined therefore to go on to the narrow gate or pass of the river which he had seen from the camp, in hopes of being able to recover the Indian path. For this purpose he waded across the river, which was now about twelve yards wide, and buried in several places by the dams of the beaver, and then went straight forward to the pass, sending one man along the river to his left, and another on the right, with orders to search for the road, and if they found it to let him know by raising a hat on the muzzle of their guns. In this order they went along for about five miles, when captain Lewis perceived with the greatest delight a man on horseback at the distance of two miles coming down the plain towards them. On examining him with the glass, captain Lewis saw that he was of a different nation from any Indians we had hitherto met.

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CHAP. XIV.

CAPTAIN LEWIS PROCEEDS BEFORE THE MAIN BODY IN SEARCH OF THE SHOSHONEES—HIS ILL SUCCESS ON THE FIRST INTERVIEW—THE PARTY WITH CAPTAIN LEWIS AT LENGTH DISCOVER THE SOURCE OF THE MISSOURI—CAPTAIN CLARKE WITH THE MAIN BODY STILL EMPLOYED IN ASCENDING THE MISSOURI OR JEFFERSON RIVER—CAPTAIN LEWIS'S SECOND INTERVIEW WITH THE SHOSHONEES ATTENDED WITH SUCCESS—THE INTERESTING CEREMONIES OF HIS FIRST INTRODUCTION TO THE NATIVES, DETAILED AT LARGE—THEIR HOSPITALITY—THEIR MODE OF HUNTING THE ANTELOPE—THE DIFFICULTIES ENCOUNTERED BY CAPTAIN CLARKE AND THE MAIN BODY IN ASCENDING THE RIVER—THE SUSPICIONS ENTERTAINED OF CAPTAIN LEWIS BY THE SHOSHONEES, AND HIS MODE OF ALLAYING THEM—THE RAVENOUS APPETITES OF THE SAVAGES ILLUSTRATED BY A SINGULAR ADVENTURE—THE INDIANS STILL JEALOUS, AND THE GREAT PAINS TAKEN BY CAPTAIN LEWIS TO PRESERVE THEIR CONFIDENCE—CAPTAIN CLARKE ARRIVES WITH THE MAIN BODY EXHAUSTED BY THE DIFFICULTIES WHICH THEY UNDERWENT.

SUNDAY, August 11. CAPTAIN LEWIS again proceeded on early, but had the mortification to find that the track which he followed yesterday soon disappeared. He determined therefore to go on to the narrow gate or pass of the river which he had seen from the camp, in hopes of being able to recover the Indian path. For this purpose he waded across the river, which was now about twelve yards wide, and barred in several places by the dams of the beaver, and then went straight forward to the pass, sending one man along the river to his left, and another on the right, with orders to search for the road, and if they found it to let him know by raising a hat on the muzzle of their guns. In this order they went along for about five miles, when captain Lewis perceived with the greatest delight a man on horseback at the distance of two miles coming down the plain towards them. On examining him with the glass, captain Lewis saw that he was of a different nation from any Indians we had hitherto met:

he was armed with a bow and a quiver of arrows; mounted on an elegant horse without a saddle, and a small string attached to the under jaw answered as a bridle. Convinced that he was a Shoshonee, and knowing how much of our success depended on the friendly offices of that nation, captain Lewis was full of anxiety to approach without alarming him, and endeavour to convince him that he was a white man. He therefore proceeded on towards the Indian at his usual pace, when they were within a mile of each other the Indian suddenly stopt, captain Lewis immediately followed his example, took his blanket from his knapsack, and holding it with both hands at the two corners, threw it above his head and unfolded it as he brought it to the ground as if in the act of spreading it. This signal which originates in the practice of spreading a robe or a skin, as a seat for guests to whom they wish to show a distinguished kindness, is the universal sign of friendship among the Indians on the Missouri and the Rocky mountains. As usual, captain Lewis repeated this signal three times: still the Indian kept his position, and looked with an air of suspicion on Drewyer and Shields who were now advancing on each side. Captain Lewis was afraid to make any signal for them to halt, lest he should increase the suspicions of the Indian, who began to be uneasy, and they were too distant to hear his voice. He, therefore, took from his pack some beads, a looking-glass and a few trinkets, which he had brought for the purpose, and leaving his gun advanced unarmed towards the Indian. He remained in the same position till captain Lewis came within two hundred yards of him, when he turned his horse, and began to move off slowly; captain Lewis then called out to him, in as loud a voice as he could, repeating the word, *tabba bone!* which in the Shoshonee language means white man; but looking over his shoulder the Indian kept his eyes on Drewyer and Shields, who were still advancing, without recollecting the impropriety of doing so at such a moment, till captain Lewis made a signal to them to halt: this Drewyer obeyed, but Shields did not observe it, and still went forward: seeing Drewyer halt the Indian turned his horse about as if to wait for captain Lewis who now reached within one hundred and fifty paces, repeating the word *tabba bone*, and holding up the trinkets in his hand, at the same time stripping up the sleeve of his shirt to show the colour of his skin. The Indian suffered him to advance within one hundred paces, then suddenly turned his horse, and giving him the whip, leaped across the creek, and disappeared in an instant among the willow bushes: with him vanished all the hopes which the sight of him had inspired of a friendly introduction to his countrymen. Though sadly disappointed by the imprudence of his two men, captain Lewis determined to make the incident of some use, and therefore calling the men to him they all set off after the

track of the horse, which they hoped might lead them to the camp of the Indian who had fled, or if he had given the alarm to any small party, their track might conduct them to the body of the nation. They now fixed a small flag of the United States on a pole, which was carried by one of the men as a signal of their friendly intentions, should the Indians observe them as they were advancing. The route lay across an island formed by a nearly equal division of the creek in the bottom: after reaching the open grounds on the right side of the creek, the track turned towards some high hills about three miles distant. Presuming that the Indian camp might be among these hills, and that by advancing hastily he might be seen and alarm them, captain Lewis sought an elevated situation near the creek, had a fire made of willow brush, and took breakfast. At the same time he prepared a small assortment of beads, trinkets, awls, some paint and a looking-glass, and placed them on a pole near the fire, in order that if the Indians returned they might discover that the party were white men and friends. Whilst making these preparations a very heavy shower of rain and hail came on, and wet them to the skin: in about twenty minutes it was over, and captain Lewis then renewed his pursuit, but as the rain had made the grass which the horse had trodden down rise again, his track could with difficulty be distinguished. As they went along they passed several places where the Indians seemed to have been digging roots to-day, and saw the fresh track of eight or ten horses, but they had been wandering about in so confused a manner that he could not discern any particular path, and at last, after pursuing it about four miles along the valley to the left under the foot of the hills, he lost the track of the fugitive Indian. Near the head of the valley they had passed a large bog covered with moss and tall grass, among which were several springs of pure cold water: they now turned a little to the left along the foot of the high hills, and reached a small creek where they encamped for the night, having made about twenty miles, though not more than ten in a direct line from their camp of last evening.

The morning being rainy and wet we did not set out with the canoes till after an early breakfast. During the first three miles we passed three small islands, six bayouts on different sides of the river, and the same number of bends towards the right. Here we reached the lower point of a large island which we called Three-thousand-mile island, on account of its being at that distance from the mouth of the Missouri. It is three miles and a half in length, and as we coasted along it we passed several small bends of the river towards the left, and two bayouts on the same side. After leaving the upper point of Three-thousand-mile island, we followed the main channel on the left side, which led

us by three small islands and several small bayous, and fifteen bends towards the right. Then at the distance of seven miles and a half we encamped on the upper end of a large island near the right. The river was shallow and rapid, so that we were obliged to be in the water during a great part of the day, dragging the canoes over the shoals and ripples. Its course too was so crooked, that notwithstanding we had made fourteen miles by water, we were only five miles from our encampment of last night. The country consists of a low ground on the river about five miles wide, and succeeded on both sides by plains of the same extent which reach to the base of the mountains. These low grounds are very much intersected by bayous, and in those on the left side is a large proportion of bog covered with tall grass, which would yield a fine turf. There are very few trees, and those small narrow-leaved cottonwood: the principal growth being the narrow-leaved willow, and currant bushes, among which were some bunches of privy near the river. We saw a number of geese, ducks, beaver, otter, deer, and antelopes, of all which one beaver was killed with a pole from the boat, three otters with a tomahawk, and the hunters brought in three deer and an antelope.

Monday, 12. This morning as soon as it was light captain Lewis sent Drewyer to reconnoitre if possible the route of the Indians: in about an hour and a half he returned, after following the tracks of the horse which we had lost yesterday to the mountains, where they ascended and were no longer visible. Captain Lewis now decided on making the circuit along the foot of the mountains which formed the cove, expecting by that means to find a road across them, and accordingly sent Drewyer on one side, and Shields on the other. In this way they crossed four small rivulets near each other, on which were some towers or conical lodges of willow brush, which seemed to have been made recently. From the manner in which the ground in the neighbourhood was torn up the Indians appeared to have been gathering roots; but captain Lewis could not discover what particular plant they were searching for, nor could he find any fresh track, till at the distance of four miles from his camp he met a large plain Indian road which came into the cove from the north-east, and wound along the foot of the mountains to the south-west, approaching obliquely the main stream he had left yesterday. Down this road he now went towards the south-west: at the distance of five miles it crossed a large run or creek, which is a principal branch of the main stream into which it falls, just above the high cliffs or gates observed yesterday, and which they now saw below them: here they halted and breakfasted on the last of the deer, keeping a small piece of pork in reserve against accident: they then continued through the low bottom

along the main stream near the foot of the mountains on their right. For the first five miles the valley continues towards the south-west from two to three miles in width; then the main stream, which had received two small branches from the left to the valley, turns abruptly to the west through a narrow bottom between the mountains. The road was still plain, and as it led them directly on towards the mountain, the stream gradually became smaller, till after going two miles it had so greatly diminished in width that one of the men, in a fit of enthusiasm, with one foot on each side of the river, thanked God that he had lived to bestride the Missouri. As they went along their hopes of soon seeing the waters of the Columbia, arose almost to painful anxiety, when after four miles from the last abrupt turn of the river, they reached a small gap formed by the high mountains which recede on each side, leaving room for the Indian road. From the foot of one of the lowest of these mountains, which rises with a gentle ascent of about half a mile, issues the remotest water of the Missouri. They had now reached the hidden sources of that river, which had never yet been seen by civilized man; and as they quenched their thirst at the chaste and icy fountain—as they sat down by the brink of that little rivulet, which yielded its distant and modest tribute to the parent ocean, they felt themselves rewarded for all their labours and all their difficulties. They left reluctantly this interesting spot, and pursuing the Indian road through the interval of the hills, arrived at the top of a ridge, from which they saw high mountains, partially covered with snow, still to the west of them. The ridge on which they stood formed the dividing line between the waters of the Atlantic and Pacific oceans. They followed a descent much steeper than that on the eastern side, and at the distance of three quarters of a mile reached a handsome bold creek of cold clear water running to the westward. They stopped to taste for the first time the waters of the Columbia; and after a few minutes followed the road across steep hills and low hollows, till they reached a spring on the side of a mountain: here they found a sufficient quantity of dry willow brush for fuel, and therefore halted for the night; and having killed nothing in the course of the day supped on their last piece of pork, and trusted to fortune for some other food to mix with a little flour and parched meal, which was all that now remained of their provisions. Before reaching the fountain of the Missouri they saw several large hawks nearly black, and some of the heath cocks: these last have a long pointed tail, and are of a uniform dark brown colour, much larger than the common dunghill fowl, and similar in habits and the mode of flying to the grouse or prairie hen. Drewyer also wounded at the distance of one hundred and thirty yards, an animal which we had not yet seen, but which after falling recovered itself.

and escaped. It seemed to be of the fox kind, rather larger than the small wolf of the plains, and with a skin in which black, reddish brown, and yellow, were curiously intermixed. On the creek of the Columbia they found a species of currant which does not grow as high as that of the Missouri, though it is more branching, and its leaf, the under disk of which is covered with a hairy pubescence, is twice as large. The fruit is of the ordinary size and shape of the currant, and supported in the usual manner, but is of a deep purple colour, acid, and of a very inferior flavour.

We proceeded on in the boats, but as the river was very shallow and rapid, the navigation is extremely difficult, and the men who are almost constantly in the water are getting feeble and sore, and so much worn down by fatigue that they are very anxious to commence travelling by land. We went along the main channel which is on the right side, and after passing nine bends in that direction, three islands and a number of bayous, reached at the distance of five and a half miles the upper point of a large island. At noon there was a storm of thunder which continued about half an hour; after which we proceeded, but as it was necessary to drag the canoes over the shoals and rapids, made but little progress. On leaving the island we passed a number of short bends, several bayous, and one run of water on the right side, and having gone by four small and two large islands, encamped on a smooth plain to the left, near a few cottonwood trees: our journey by water was just twelve miles, and four in a direct line. The hunters supplied us with three deer and a fawn.

Tuesday, 13. Very early in the morning captain Lewis resumed the Indian road, which led him in a western direction, through an open broken country; on the left was a deep valley at the foot of a high range of mountains running from south-east to north-west, with their sides better clad with timber than the hills to which we had been for some time accustomed, and their tops covered in part with snow. At five miles distance, after following the long descent of another valley, he reached a creek about ten yards wide, and on rising the hill beyond it had a view of a handsome little valley on the left, about a mile in width, through which they judged, from the appearance of the timber, that some stream of water most probably passed. On the creek they had just left were some bushes of the white maple, the sumach of the small species with the winged rib, and a species of honeysuckle, resembling in its general appearance and the shape of its leaf, the small honeysuckle of the Missouri, except that it is rather larger, and bears a globular berry, about the size of a garden pea, of a white colour, and formed of a soft white mucilaginous substance, in which are

several small brown seeds irregularly scattered without any cell, and enveloped in a smooth thin pellicle.

They proceeded along a waving plain parallel to this valley for about four miles, when they discovered two women, a man and some dogs on an eminence at the distance of a mile before them. The strangers first viewed them apparently with much attention for a few minutes, and then two of them sat down as if to await captain Lewis's arrival. He went on till he reached within about half a mile, then ordered his party to stop, put down his knapsack and rifle, and unfurling the flag advanced alone towards the Indians. The females soon retreated behind the hill, but the man remained till captain Lewis came within a hundred yards of him, when he too went off, though captain Lewis called out *tabba bone!* loud enough to be heard distinctly. He hastened to the top of the hill, but they had all disappeared. The dogs however were less shy, and came close to him; he therefore thought of tying a handkerchief with some beads round their necks, and then let them loose to convince the fugitives of his friendly disposition, but they would not suffer him to take hold of them, and soon left him. He now made a signal to the men, who joined him, and then all followed the track of the Indians, which led along a continuation of the same road they had been already travelling. It was dusty and seemed to have been much used lately both by foot passengers and horsemen. They had not gone along it more than a mile when on a sudden they saw three female Indians, from whom they had been concealed by the deep ravines which intersected the road, till they were now within thirty paces of each other; one of them, a young woman, immediately took to flight, the other two, an elderly woman and a little girl, seeing we were too near for them to escape, sat on the ground, and holding down their heads seemed as if reconciled to the death which they supposed awaited them. The same habit of holding down the head and inviting the enemy to strike, when all chance of escape is gone, is preserved in Egypt to this day. Captain Lewis instantly put down his rifle, and advancing towards them, took the woman by the hand, raised her up, and repeated the words *tabba bone!* at the same time stripping up his shirt sleeve to prove that he was a white man, for his hands and face had become by constant exposure quite as dark as their own. She appeared immediately relieved from her alarm, and Drewyer and Shields now coming up, captain Lewis gave them some beads, a few awls, pewter mirrors, and a little paint, and told Drewyer to request the woman to recall her companion who had escaped to some distance, and by alarming the Indians might cause them to attack him without any time for explanation. She did as she was desired, and the young woman returned almost

out of breath: captain Lewis gave her an equal portion of trinkets, and painted the tawny cheeks of all three of them with vermilion, a ceremony which among the Shoshonees is emblematic of peace. After they had become composed, he informed them by signs of his wish to go to their camp in order to see their chiefs and warriors; they readily obeyed, and conducted the party along the same road down the river. In this way they marched two miles, when they met a troop of nearly sixty warriors mounted on excellent horses riding at full speed towards them. As they advanced captain Lewis put down his gun, and went with the flag about fifty paces in advance. The chief, who, with two men, was riding in front of the main body, spoke to the women, who now explained that the party was composed of white men, and showed exultingly the presents they had received. The three men immediately leaped from their horses, came up to captain Lewis and embraced him with great cordiality, putting their left arm over his right shoulder and clasping his back, applying at the same time their left cheek to his, and frequently vociferating *ah hi e! ah hi e!* "I am much pleased, I am much rejoiced." The whole body of warriors now came forward, and our men received the caresses, and no small share of the grease and paint of their new friends. After this fraternal embrace, of which the motive was much more agreeable than the manner, captain Lewis lighted a pipe and offered it to the Indians, who had now seated themselves in a circle around the party. But before they would receive this mark of friendship they pulled off their moccasins, a custom, as we afterwards learnt, which indicates the sacred sincerity of their professions when they smoke with a stranger, and which imprecates on themselves the misery of going barefoot for ever if they are faithless to their words, a penalty by no means light to those who rove over the thorny plains of their country. It is not unworthy to remark, the analogy which some of the customs of those wild children of the wilderness bear to those recorded in holy writ. Moses is admonished to pull off his shoes for the place on which he stood was holy ground. Why this was enjoined as an act of peculiar reverence; whether it was from the circumstance that in the arid region in which the patriarch then resided it was deemed a test of the sincerity of devotion to walk upon the burning sands barefooted, in some measure analogous to the pains inflicted by the prickly pear, does not appear. After smoking a few pipes, some trifling presents were distributed amongst them, with which they seemed very much pleased, particularly with the blue beads and the vermilion. Captain Lewis then informed the chief that the object of his visit was friendly, and should be explained as soon as he reached their camp; but that in the meantime as the sun was oppressive, and no water near, he wished to go there as soon as possible.

They now put on their moccasins, and their chief, whose name was Cameahwait, made a short speech to the warriors. Captain Lewis then gave him the flag, which he informed him was among white men the emblem of peace, and now that he had received it was to be in future the bond of union between them. The chief then moved on, our party followed him, and the rest of the warriors in a squadron, brought up the rear. After marching a mile they were halted by the chief, who made a second harangue, on which six or eight young men rode forward to their camp, and no further regularity was observed in the order of march. At the distance of four miles from where they had first met, they reached the Indian camp, which was in a handsome level meadow on the bank of the river. Here they were introduced into an old leathern lodge, which the young men who had been sent from the party had fitted up for their reception. After being seated on green boughs and antelope skins, one of the warriors pulled up the grass in the centre of the lodge so as to form a vacant circle of two feet diameter, in which he kindled a fire. The chief then produced his pipe and tobacco, the warriors all pulled off their moccasins, and our party was requested to take off their own. This being done, the chief lighted his pipe at the fire within the magic circle, and then retreating from it began a speech several minutes long, at the end of which he pointed the stem towards the four cardinal points of the heavens, beginning with the east and concluding with the north. After this ceremony he presented the stem in the same way to captain Lewis, who supposing it an invitation to smoke, put out his hand to receive the pipe, but the chief drew it back, and continued to repeat the same offer three times, after which he pointed the stem first to the heavens, then to the centre of the little circle, took three whiffs himself, and presented it again to captain Lewis. Finding that this last offer was in good earnest, he smoked a little, the pipe was then held to each of the white men, and after they had taken a few whiffs was given to the warriors. This pipe was made of a dense transparent green stone, very highly polished, about two and an half inches long, and of an oval figure, the bowl being in the same situation with the stem. A small piece of burnt clay is placed in the bottom of the bowl to separate the tobacco from the end of the stem, and is of an irregularly round figure, not fitting the tube perfectly close, in order that the smoke may pass with facility. The tobacco is of the same kind with that used by the Minnetarees, Mandans, and Ricaras of the Missouri. The Shoshonees do not cultivate this plant, but obtain it from the Rocky mountain Indians, and some of the bands of their own nation who live further south. The ceremony of smoking being concluded, captain Lewis explained to the chief the purposes of his visit, and as by this

time all the women and children of the camp had gathered around the lodge to indulge in a view of the first white men they had ever seen, he distributed among them the remainder of the small articles he had brought with him. It was now late in the afternoon, and our party had tasted no food since the night before. On apprising the chief of this circumstance, he said that he had nothing but berries to eat, and presented some cakes made of serviceberry and chokecherries which had been dried in the sun. On these captain Lewis made a hearty meal, and then walked down towards the river: he found it a rapid clear stream forty yards wide and three feet deep: the banks were low and abrupt, like those of the upper part of the Missouri, and the bed formed of loose stones and gravel. Its course, as far as he could observe it, was a little to the north of west, and was bounded on each side by a range of high mountains, of which those on the east are the lowest and most distant from the river.

The chief informed him that this stream discharged itself at the distance of half a day's march, into another of twice its size, coming from the south-west; but added, on further inquiry, that there was scarcely more timber below the junction of those rivers than in this neighbourhood, and that the river was rocky, rapid, and so closely confined between high mountains, that it was impossible to pass down it, either by land or water to the great lake, where as he had understood the white men lived. This information was far from being satisfactory; for there was no timber here that would answer the purpose of building canoes, indeed not more than just sufficient for fuel, and even that consisted of the narrow-leaved cottonwood, the red and the narrow-leaved willow, the chokecherry, serviceberry, and a few currant bushes such as are common on the Missouri. The prospect of going on by land is more pleasant; for there are great numbers of horses feeding in every direction round the camp, which will enable us to transport our stores if necessary over the mountains. Captain Lewis returned from the river to his lodge, and on his way an Indian invited him into his bower and gave him a small morsel of boiled antelope and a piece of fresh salmon roasted. This was the first salmon he had seen, and perfectly satisfied him that he was now on the waters of the Pacific. On reaching this lodge, he resumed his conversation with the chief, after which he was entertained with a dance by the Indians. It now proved, as our party had feared, that the men whom they had first met this morning had returned to the camp and spread the alarm that their enemies, the Minnetarees of fort de Prairie, whom they call Pahkees, were advancing on them. The warriors instantly armed themselves and were coming down in expectation of an attack, when they were agreeably surprised by meeting our party. The greater part of them were armed with bows and arrows, and shields, but a few

had small fusils, such as are furnished by the North-west Company traders, and which they had obtained from the Indians on the Yellowstone, with whom they are now at peace. They had reason to dread the approach of the Pahkees, who had attacked them in the course of this spring and totally defeated them. On this occasion twenty of their warriors were either killed or made prisoners, and they lost their whole camp, except the leathern lodge which they had fitted up for us, and were now obliged to live in huts of a conical figure made with willow brush. The music and dancing, which was in no respect different from those of the Missouri Indians, continued nearly all night; but captain Lewis retired to rest about twelve o'clock, when the fatigues of the day enabled him to sleep though he was awaked several times by the yells of the dancers.

Whilst all these things were occurring to captain Lewis we were slowly and laboriously ascending the river. For the first two and a half miles we went along the island opposite to which we encamped last evening, and soon reached a second island, behind which comes in a small creek on the left side of the river. It rises in the mountains to the east, and forms a handsome valley for some miles from its mouth, where it is a bold running stream, about seven yards wide: we called it M'Neal's creek, after Hugh M'Neal one of our party. Just above this stream, and at the distance of four miles from our camp, is a point of limestone rock on the right, about seventy feet high, forming a cliff over the river. From the top of it the Beaver's head bore north 24° east, twelve miles distant, the course of Wisdom river, that is, the direction of its valley through the mountains, is north 25° west, while the gap, through which the Jefferson enters the mountains, is ten miles above us, on a course south 18° west. From this limestone rock we proceeded along several islands, on both sides, and after making twelve miles, arrived at a cliff of high rocks on the right, opposite to which we encamped in a smooth-level prairie, near a few cottonwood trees; but were obliged to use the dry willow brush for fuel. The river is still very crooked, the bends short and abrupt, and obstructed by so many shoals, over which the canoes were to be dragged, that the men were in the water three-fourths of the day. They saw numbers of otter, some beaver, antelopes, ducks, geese, and cranes, but they killed nothing except a single deer. They however caught some very fine trout, as they have done for several days past. The weather had been cloudy and cool during the forepart of the day, and at eight o'clock a shower of rain fell.

Wednesday, 14. In order to give time for the boats to reach the forks of Jefferson river, captain Lewis determined to remain here and obtain all the information he could collect with regard to the country. Having nothing to eat

but a little flour and parched meal, with the berries of the Indians, he sent out Drewyer and Shields, who borrowed horses from the natives, to hunt for a few hours. About the same time the young warriors set out for the same purpose. There are but few elk or black-tailed deer in this neighbourhood, and as the common red-deer secrete themselves in the bushes when alarmed, they are soon safe from the arrows, which are but feeble weapons against any animals which the huntsmen cannot previously run down with their horses. The chief game of the Shoshonees, therefore, is the antelope, which when pursued retreats to the open plains, where the horses have full room for the chase. But such is its extraordinary fleetness and wind, that a single horse has no chance of outrunning it, or tiring it down; and the hunters are therefore obliged to resort to stratagem. About twenty Indians, mounted on fine horses, and armed with bows and arrows, left the camp; in a short time they descried a herd of antelopes: they immediately separated into little squads of two or three, and formed a scattered circle round the herd for five or six miles, keeping at a wary distance, so as not to alarm them till they were perfectly enclosed, and usually selecting some commanding eminence as a stand. Having gained their positions, a small party rode towards the herd, and with wonderful dexterity the huntsman preserved his seat, and the horse his footing, as he ran at full speed over the hills, and down the steep ravines, and along the borders of the precipices. They were soon outstripped by the antelopes, which, on gaining the other extremity of the circle, were driven back and pursued by the fresh hunters. They turned and flew, rather than ran, in another direction; but there too, they found new enemies. In this way they were alternately pursued backwards and forwards, till at length, notwithstanding the skill of the hunters, they all escaped, and the party after running for two hours returned without having caught any thing, and their horses foaming with sweat. This chase, the greater part of which was seen from the camp, formed a beautiful scene; but to the hunters is exceedingly laborious and so unproductive, even when they are able to worry the animal down and shoot him, that forty or fifty hunters will sometimes be engaged for half a day without obtaining more than two or three antelopes. Soon after they returned, our two huntsmen came in with no better success. Captain Lewis therefore made a little paste with the flower, and the addition of some berries formed a very palatable repast. Having now secured the good-will of Cameahwait, captain Lewis informed him of his wish that he would speak to the warriors and endeavour to engage them to accompany him to the forks of Jefferson river, where by this time another chief, with a large party of white men, was waiting his return: that it would be necessary to take about thirty

horses to transport the merchandize; that they should be well rewarded for their trouble; and that when all the party should have reached the Shoshonee camp, they would remain some time among them, and trade for horses as well as concert plans for furnishing them in future with regular supplies of merchandize. He readily consented to do so, and after collecting the tribe together he made a long harangue, and in about an hour and a half returned, and told captain Lewis that he would be ready to accompany him in the morning.

As the early part of the day was cold, and the men stiff and sore from the fatigues of yesterday, we did not set out till seven o'clock. At the distance of a mile we passed a bold stream on the right, which comes from a snowy mountain to the north, and its entrance is four yards wide, and three feet in depth: we called it Track creek: at six miles further we reached another stream which heads in some springs at the foot of the mountains on the left. After passing a number of bayous and small islands on each side, we encamped about half a mile by land below the Rattlesnake cliffs. The river was cold, shallow, and as it approached the mountains formed one continued rapid, over which we were obliged to drag the boats with great labour and difficulty. By using constant exertions we succeeded in making fourteen miles, but this distance did not carry us more than six and a half in a straight line: several of the men have received wounds and lamed themselves in hauling the boats over the stones. The hunters supplied them with five deer and an antelope.

Thursday, 15. Captain Lewis rose early, and having eaten nothing yesterday except his scanty meal of flower and berries, felt the inconveniences of extreme hunger. On inquiry he found that his whole stock of provisions consisted of two pounds of flour. This he ordered to be divided into two equal parts, and one half of it boiled with the berries into a sort of pudding; and after presenting a large share to the chief, he and his three men breakfasted on the remainder. Cameahwait was delighted at this new dish, he took a little of the flour in his hand, tasted and examined it very narrowly, asking if it was made of roots; captain Lewis explained the process of preparing it, and he said it was the best thing he had eaten for a long time.

This being finished, captain Lewis now endeavoured to hasten the departure of the Indians who still hesitated, and seemed reluctant to move, although the chief addressed them twice for the purpose of urging them: on inquiring the reason, Cameahwait told him that some foolish person had suggested that he was in league with their enemies the Pahkees, and had come only to draw them into ambuscade, but that he himself did not believe it: captain Lewis felt uneasy at this insinuation; he knew the suspicious temper of the Indians,

accustomed from their infancy to regard every stranger as an enemy, and saw that if this suggestion were not instantly checked, it might hazard the total failure of the enterprise. Assuming therefore a serious air, he told the chief that he was sorry to find they placed so little confidence in him, but that he pardoned their suspicions, because they were ignorant of the character of white men, among whom it was disgraceful to lie and entrap even an enemy by falsehood; that if they continued to think thus meanly of us, they might be assured no white men would ever come to supply them with arms and merchandize; that there was at this moment a party of white men waiting to trade with them at the forks of the river; and that if the greater part of the tribe entertained any suspicion, he hoped there were still among them some who were men, who would go and see with their own eyes the truth of what he said, and who, even if there was any danger, were not afraid to die. To doubt the courage of an Indian is to touch the tenderest string of his mind, and the surest way to rouse him to any dangerous achievement. Cameahwait instantly replied, that he was not afraid to die, and mounting his horse, for the third time harangued the warriors: he told them that he was resolved to go if he went alone, or if he were sure of perishing; that he hoped there were among those who heard him some who were not afraid to die, and who would prove it by mounting their horses and following him. This harangue produced an effect on six or eight only of the warriors, who now joined their chief. With these captain Lewis smoked a pipe, and then, fearful of some change in their capricious temper, set out immediately. It was about twelve o'clock when his small party left the camp, attended by Cameahwait and the eight warriors: their departure seemed to spread a gloom over the village; those who would not venture to go were sullen and melancholy, and the women were crying and imploring the Great Spirit to protect their warriors as if they were going to certain destruction: yet such is the wavering inconstancy of these savages, that captain Lewis's party had not gone far when they were joined by ten or twelve more warriors, and before reaching the creek which they had passed on the morning of the 13th, all the men of the nation, and a number of women had overtaken them, and had changed from the surly ill temper in which they were two hours ago, to the greatest cheerfulness and gaiety. When they arrived at the spring, on the side of the mountain, where the party had encamped on the 12th, the chief insisted on halting to let the horses graze; to which captain Lewis assented and smoked with them. They are excessively fond of the pipe, in which however they are not able to indulge much, as they do not cultivate tobacco themselves, and their