

been a battle between these tribes, but we could not ascertain the loss on either side. The water rose to-day eight inches, a rise which we could only ascribe to the circumstance of the wind's having been up the river for the last twenty-four hours, since the influence of the tide cannot be sensible here on account of the falls below. The hunters returned in the evening; they had seen the tracks of elk and bear in the mountains, and killed five deer, four very large grey squirrels, and a grouse: they inform us that the country off the river is broken, stony, and thinly timbered with pine and white oak. Besides these delicacies one of the men killed with a gig a salmon trout, which, being fried in some bear's oil, which had been given to us by the chief whom we had met this morning below the Narrows, furnished a dish of a very delightful flavour. A number of white cranes were also seen flying in different directions, but at such a height that we could not procure any of them.

The fleas, with whom we had contracted an intimacy at the Falls, are so unwilling to leave us, that the men are obliged to throw off all their clothes, in order to relieve themselves from their persecution.

Sunday, 27. The wind was high from the westward during last night and this morning, but the weather being fair we continued our celestial observations. The two chiefs who remained with us, were joined by seven Indians, who came in a canoe from below. To these men we were very particular in our attentions; we smoked and ate with them; but some of them, who were tempted by the sight of our goods exposed to dry, wished to take liberties with them; to which we were under the necessity of putting an immediate check: this restraint displeased them so much, that they returned down the river in a very ill humour. The two chiefs however remained with us till the evening, when they crossed the river to their party. Before they went we procured from them a vocabulary of the Echeloot, their native language, and on comparison were surprised at its difference from that of the Eneeshur tongue. In fact, although the Echeloots, who live at the Great Narrows, are not more than six miles from the Eneeshurs or residents at and above the Great Falls, the two people are separated by a broad distinction of language. The Eneeshurs are understood by all the tribes residing on the Columbia, above the Falls; but at that place they meet with the unintelligible language of the Echeloots, which then descends the river to a considerable distance. Yet the variation may possibly be rather a deep shade of dialect than a radical difference, since among both many words are the same, and the identity cannot be accounted for by supposing that their neighbourhood has interwoven them into their daily conversations, because the same words are equally familiar among all the Flathead bands which we have

passed. To all these tribes too the strange clucking or guttural noise which first struck us is common. They also flatten the heads of the children in nearly the same manner, but we now begin to observe that the heads of the males, as well as of the other sex, are subjected to this operation, whereas among the mountains custom has confined it almost to the females. The hunters brought home four deer, one grouse, and a squirrel.

Monday, 28. The morning was again cool and windy. Having dried our goods, we were about setting out, when three canoes came from above to visit us, and at the same time two others from below arrived for the same purpose. Among these last was an Indian who wore his hair in a queue, and had on a round hat, and a sailor's jacket, which he said he had obtained from the people below the great rapids, who bought them from the whites. This interview detained us till nine o'clock, when we proceeded down the river, which is now bordered with cliffs of loose dark-coloured rocks about ninety feet high, with a thin covering of pine and other small trees. At the distance of four miles we reached a small village of eight houses under some high rocks on the right, with a small creek on the opposite side of the river. We landed and found the houses similar to those we had seen at the Great Narrows: on entering one of them we saw a British musket, a cutlass, and several brass tea-kettles, of which they seemed to be very fond. There were figures of men, birds, and different animals, which were cut and painted on the boards which form the sides of the room, and though the workmanship of these uncouth figures was very rough, they were as highly esteemed by the Indians as the finest frescoes of more civilized people. This tribe is called the Chilluckittegnaw, and their language, although somewhat different from that of the Echeloots, has many of the same words, and is sufficiently intelligible to the neighbouring Indians. We procured from them a vocabulary, and then after buying five small dogs, some dried berries, and a white bread or cake made of roots, we left them. The wind however rose so high, that we were obliged, after going one mile, to land on the left side, opposite to a rocky island, and pass the day there. We formed our camp in a niche above a point of high rocks, and as it was the only safe harbour we could find, submitted to the inconvenience of lying on the sand, exposed to the wind and rain during all the evening. The high wind, which obliged us to consult the safety of our boats by not venturing further, did not at all prevent the Indians from navigating the river. We had not been long on shore, before a canoe, with a man, his wife, and two children, came from below through the high waves with a few roots to sell; and soon after we were visited by many Indians from the village above, with whom we smoked and conversed. The

canoes used by these people are like those already described, built of white cedar or pine, very light, wide in the middle, and tapering towards the ends, the bow being raised and ornamented with carvings of the heads of animals. As the canoe is the vehicle of transportation, the Indians have acquired great dexterity in the management of it, and guide it safely over the highest waves. They have among their utensils bowls and baskets very neatly made of small bark and grass, in which they boil their provisions. The only game seen to-day were two deer, of which only one was killed, the other was wounded but escaped.

Tuesday, 29. The morning was still cloudy, and the wind from the west, but as it had abated its violence, we set out at daylight. At the distance of four miles we passed a creek on the right, one mile below which is a village of seven houses on the same side. This is the residence of the principal chief of the Chilluckittequaw nation, whom we now found to be the same between whom and our two chiefs we had made a peace at the Echeloot village. He received us very kindly, and set before us pounded fish, filberts, nuts, the berries of the *Sacacomis*, and white bread made of roots. We gave in return a bracelet of ribbon to each of the women of the house, with which they were very much pleased. The chief had several articles, such as scarlet and blue cloth, a sword, a jacket and hat, which must have been procured from the whites, and on one side of the room were two wide split boards placed together, so as to make space for a rude figure of a man cut and painted on them. On pointing to this and asking them what it meant, he said something, of which all we understood was "good," and then stepped to the image and brought out his bow and quiver, which, with some other warlike instruments, were kept behind it. The chief then directed his wife to hand him his medicine-bag, from which he brought out fourteen forefingers, which he told us had once belonged to the same number of his enemies, whom he had killed in fighting with the nations to the south-east, to which place he pointed, alleging no doubt to the Snake Indians, the common enemy of the nations on the Columbia. This bag is about two feet in length, containing roots, pounded dirt, &c. which the Indians only know how to appreciate. It is suspended in the middle of the lodge, and it is supposed to be a species of sacrilege to be touched by any but the owner. It is an object of religious fear, and it is from its sanctity the safest place to deposit their medals and their more valuable articles. The Indians have likewise small bags which they preserve in their great medicine-bag, from whence they are taken and worn around their waists and necks as amulets against any real or imaginary evils. This was the first time we had ever known the Indians to carry from the field any other trophy except the scalp. They were shown with great exultation, and after an

harangue which we were left to presume was in praise of his exploits, the fingers were carefully replaced among the valuable contents of the red medicine-bag.

This village being part of the same nation with the village we passed above, the language of the two is the same, and their houses of similar form and materials, and calculated to contain about thirty souls. The inhabitants were unusually hospitable and good humoured, so that we gave to the place the name of the Friendly village. We breakfasted here, and after purchasing twelve dogs, four sacks of fish, and a few dried berries, proceeded on our journey. The hills as we passed are high with steep and rocky sides, and some pine and white oak, and an undergrowth of shrubs scattered over them. Four miles below this village is a small river on the right side; immediately below is a village of Chilluckittequaws, consisting of eleven houses. Here we landed and smoked a pipe with the inhabitants, who were very cheerful and friendly. They as well as the people of the last village inform us, that this river comes a considerable distance from the N. N. E. that it has a great number of falls, which prevent the salmon from passing up, and that there are ten nations residing on it who subsist on berries, or such game as they can procure with their bows and arrows. At its mouth the river is sixty yards wide, and has a deep and very rapid channel. From the number of falls of which the Indians spoke, we gave it the name of Cataract river. We purchased four dogs, and then proceeded. The country as we advance is more rocky and broken, and the pine and low whiteoak on the hills increase in great quantity. Three miles below Cataract river we passed three large rocks in the river; that in the middle is larger and longer than the rest, and from the circumstance of its having several square vaults on it, obtained the name of Sepulchre island. A short distance below are two huts of Indians on the right: the river now widens, and in three miles we came to two more houses on the right; one mile beyond which is a rocky island in a bend of the river towards the left. Within the next six miles we passed fourteen huts of Indians, scattered on the right bank, and then reached the entrance of a river on the left, which we called Labieshe's river, after Labieshe one of our party. Just above this river is a low ground more thickly timbered than usual, and in front are four huts of Indians on the bank, which are the first we have seen on that side of the Columbia. The exception may be occasioned by this spot's being more than usually protected from the approach of their enemies, by the creek, and the thick wood behind.

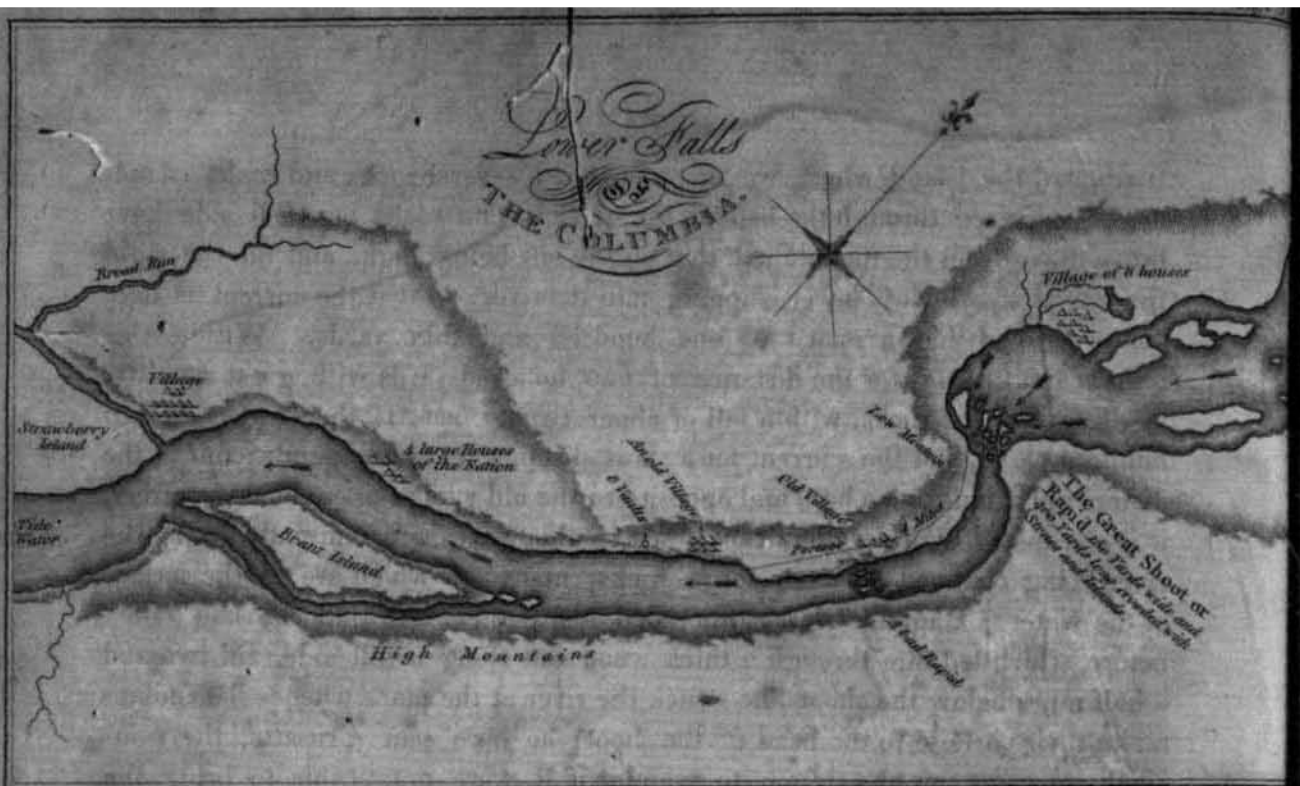
We again embarked, and at the distance of a mile passed the mouth of a rapid creek on the right eighteen yards wide: in this creek the Indians whom we left take their fish, and from the number of canoes which were in it, —

called it Canoe creek. Opposite to this creek is a large sandbar, which continues for four miles along the left side of the river. Just below this a beautiful cascade falls in on the left over a precipice of rock one hundred feet in height. One mile further are four Indian huts in the low ground on the left: and two miles below this a point of land on the right, where the mountains become high on both sides, and possess more timber and greater varieties of it than hitherto, and those on the left are covered with snow. One mile from this point we halted for the night at three Indian huts on the right, having made thirty-two miles. On our first arrival they seemed surprised, but not alarmed at our appearance, and we soon became intimate by means of smoking, and our favourite entertainment for the Indians, the violin. They gave us fruit, some roots, and root-bread, and we purchased from them three dogs. The houses of these people are similar to those of the Indians above, and their language the same: their dress also, consisting of robes or skins of wolves, deer, elk, and wild-cat, is nearly after the same model: their hair is worn in plaits down each shoulder, and round their neck is put a strip of some skin with the tail of the animal hanging down over the breast: like the Indians above they are fond of otter skins, and give a great price for them. We here saw the skin of a mountain sheep, which they say live among the rocks in the mountains: the skin was covered with white hair, the wool long, thick, and coarse, with long coarse hair on the top of the neck, and the back resembling somewhat the bristles of a goat. Immediately behind the village is a pond, in which were great numbers of small swan.

Wednesday, 30. A moderate rain fell during all last night, but the morning was cool, and after taking a scanty breakfast of deer, we proceeded. The river is now about three quarters of a mile wide, with a current so gentle, that it does not exceed one mile and a half an hour; but its course is obstructed by the projection of large rocks, which seemed to have fallen promiscuously from the mountains into the bed of the river. On the left side four different streams of water empty themselves in cascades from the hills: what is, however, most singular is, that there are stumps of pine trees scattered to some distance in the river, which has the appearance of being dammed below, and forced to encroach on the shore: these obstructions continue till at the distance of twelve miles, when we came to the mouth of a river on the right, where we landed: we found it sixty yards wide, and its banks possess two kinds of timber which we had not hitherto seen: one is a very large species of ash; the other resembling in its bark the birch, but the tree itself, as also the leaves, are smaller. We called this stream Crasatte's river, after Crasatte, one of our men: opposite to its

mouth the Columbia widens to the distance of a mile, with a large sandbar, and large stones and rocks scattered through the channel. We here saw several of the large buzzards, which are of the size of the largest eagle, with the under part, of their wings white: we also shot a deer and three ducks; on part of which we dined, and then continued down the Columbia. Above Crusatte's river the low grounds are about three quarters of a mile wide, rising gradually to the hills, and with a rich soil covered with grass, fern, and other small undergrowth; but below, the country rises with a steep ascent, and soon the mountains approach to the river with steep rugged sides, covered with a very thick growth of pine, cedar, cottonwood, and oak. The river is still strewed with large rocks. Two and a half miles below Crusatte's river is a large creek on the right, with a small island in the mouth. Just below this creek we passed along the right side of three small islands on the right bank of the river, with a larger island on the opposite side, and landed on an island very near the right shore at the head of the great shoot, and opposite to two smaller islands at the fall or shoot itself. Just above the island on which we were encamped is a small village of eight large houses in a bend on the right, where the country, from having been very mountainous, becomes low for a short distance. We had made fifteen miles to-day, during all which time we were kept constantly wet with the rain; but as we were able to get on this island some of the ash which we saw for the first time to-day, and which makes a tolerable fire, we were as comfortable as the moistness of the evening would permit. As soon as we landed, captain Lewis went with five men to the village, which is situated near the river, with ponds in the low grounds behind. The greater part of the inhabitants were absent collecting roots down the river: the few, however, who were at home, treated him very kindly, and gave him berries, nuts, and fish; and in the house were a gun and several articles which must have been procured from the whites; but not being able to procure any information he returned to the island. Captain Clarke had in the meantime gone down to examine the shoot, and to discover the best route for a portage. He followed an Indian path, which, at the distance of a mile, led to a village on an elevated situation, the houses of which had been large, but built in a different form from any we had yet seen, but which had been lately abandoned, the greater part of the boards being put into a pond near the village: this was, most probably, for the purpose of drowning the fleas, which were in immense quantities near the houses. After going about three miles the night obliged him to return to camp: he resumed his search in the morning.

Thursday, 31st, through the rain. At the extremity of the bay, in which



is situated the island where we are encamped, several rocks and rocky islands are interspersed through the bed of the river. The rocks on each side have fallen down from the mountains; that on the left being high, and on the right the hill itself, which is lower, slipping into the river; so that the current is here compressed within a space of one hundred and fifty yards. Within this narrow limit it runs for the distance of four hundred yards with great rapidity, swelling over the rocks, with a fall of about twenty feet: it then widens to two hundred paces, and the current for a short distance becomes gentle; but at the distance of a mile and a half, and opposite to the old village mentioned yesterday, it is obstructed by a very bad rapid, where the waves are unusually high, the river being confined between large rocks, many of which are at the surface of the water. Captain Clarke proceeded along the same path he had taken before, which led him through a thick wood and along a hill side, till two and a half miles below the shoots, he struck the river at the place whence the Indians make their portage to the head of the shoot: he here sent Crusatte, the principal waterman, up the stream, to examine if it were practicable to bring the canoes down the water. In the meantime, he, with Joseph Fields, continued his route down the river, along which the rapids seem to stretch as far as he could see. At half a mile below the end of the portage, he came to a house, the only remnant of a town, which, from its appearance, must have been of great antiquity. The house was uninhabited, and being old and decayed, he felt no disposition to encounter the fleas, which abound in every situation of that kind, and therefore did not enter. About half a mile below this house, in a very thick part of the woods, is an ancient burial place: it consists of eight vaults made of pine, or cedar boards, closely connected, about eight feet square and six in height; the top secured, covered with wide boards sloping a little, so as to convey off the rain: the direction of all of them is east and west, the door being on the eastern side, and partially stopped with wide boards, decorated with rude pictures of men and other animals. On entering we found in some of them four dead bodies, carefully wrapped in skins, tied with cords of grass and bark, lying on a mat in a direction east and west: the other vaults contained only bones, which were in some of them piled to the height of four feet: on the tops of the vaults, and on poles attached to them, hung brass kettles and frying-pans, with holes in their bottoms, baskets, bowls, sea-shells, skins, pieces of cloth, hair, bags of trinkets, and small bones, the offerings of friendship or affection, which have been saved by a pious veneration from the ferocity of war, or the more dangerous temptations of individual gain. The whole of the walls as well as the door were decorated with strange figures cut and painted on them:

and besides these were several wooden images of men, some of them so old and decayed as to have almost lost their shape, which were all placed against the sides of the vaults. These images, as well as those in the houses we have lately seen, do not appear to be at all the objects of adoration: in this place they were most probably intended as resemblances of those whose decease they indicate; and when we observe them in houses, they occupy the most conspicuous part; but are treated more like ornaments than objects of worship. Near the vaults which are standing, are the remains of others on the ground, completely rotted and covered with moss; and as they are formed of the most durable pine and cedar timber, there is every appearance, that for a very long series of years this retired spot has been the depository for the Indians near this place. After examining this place captain Clarke went on, and found the river as before strewn with large rocks, against which the water ran with great rapidity. Just below the vaults the mountain, which is but low on the right side, leaves the river, and is succeeded by an open stony level, which extends down the river, while on the left the mountain is still high and rugged. At two miles distance he came to a village of four houses, which were now vacant and the doors barred up; on looking in he saw the usual quantity of utensils still remaining, from which he concluded that the inhabitants were at no great distance collecting roots or hunting, in order to lay in their supply of food for the winter: he left them and went on three miles to a difficult rocky rapid, which was the last in view. Here on the right, are the remains of a large and ancient village, which could be plainly traced by the holes for the houses, and the deposits for fish. After he had examined these rapids, and the neighbouring country, he returned to camp by the same route: the only game he had obtained was a sandhill crane.

In the meantime we had been occupied in preparations for making the portage, and in conference with the Indians, who came down from the village to visit us. Towards evening two canoes arrived from the village at the mouth of Cataract river, loaded with fish and bears' grease, for the market below: as soon as they landed they unloaded the canoes, turned them upside down on the beach, and encamped under a shelving rock near our camp. We had an opportunity of seeing to-day the hardihood of the Indians of the neighbouring village: one of the men shot a goose, which fell into the river, and was floating rapidly towards the great shoot, when an Indian observing it plunged in after it; the whole mass of the waters of the Columbia, just preparing to descend its narrow channel, carried the animal down with great rapidity; the Indian followed it fearlessly, to within one hundred and fifty feet of the rocks, where he would inevitably have been dashed to pieces; but seizing his prey he turned round and swam

ashore with great composure. We very willingly relinquished our right to the bird in favour of the Indian who had thus saved it at the imminent hazard of his life: he immediately set to work, and picked off about half the feathers, and then without opening it ran a stick through it, and carried it off to roast.

Friday, November 1, 1805. The morning was cool and the wind high from the north-east. The Indians who arrived last night, took their empty canoes on their shoulders and carried them below the great shoot, where they put them in the water and brought them down the rapid, till at the distance of two and a half miles they stopped to take in their loading, which they had been afraid to trust in the last rapid, and had therefore carried by land from the head of the shoot.

After their example we carried our small canoe, and all the baggage across the slippery rocks to the foot of the shoot. The four large canoes were next brought down, by slipping them along poles, placed from one rock to another, and in some places by using partially streams which escaped along side of the river. We were not, however, able to bring them across without three of them receiving injuries, which obliged us to stop at the end of the shoot to repair them. At this shoot we saw great numbers of sea-otters; but they are so shy that it is difficult to reach them with the musket: one of them that was wounded to-day sunk and was lost. Having by this portage avoided the rapid and shoot of four hundred yards in length, we re-embarked, passed at a mile and a half the bad rapid opposite to the old village on the right, and making our way through the rocks, saw the house just below the end of the portage; the eight vaults near it; and at the distance of four miles from the head of the shoot, reached a high rock; which forms the upper part of an island near the left shore. Between this island and the right shore we proceeded, leaving at the distance of a mile and a half, the village of four houses on our right, and a mile and a half lower came to the head of a rapid near the village on the right. Here we halted for the night, having made only seven miles from the head of the shoot. During the whole of the passage the river is very much obstructed by rocks. The island, which is about three miles long, reaches to the rapid which its lower extremity contributes to form. The meridian altitude of to-day, gave us the latitude of $45^{\circ} 44' 3''$ north. As we passed the village of four houses, we found that the inhabitants had returned, and stopped to visit them. The houses are similar to those already described, but larger, from thirty-five to fifty feet long, and thirty feet wide, being sunk in the ground about six feet, and raised the same height above. Their beds are raised about four feet and a half from the floor, and the ascent is by a

new painted ladder, with which every family is provided, and under them are stored their dried fish, while the space between the part of the bed on which they lie and the wall of the house is occupied by the nuts, roots, berries, and other provisions, which are spread on mats. The fireplace is about eight feet long, and six feet wide, sunk a foot below the floor, secured by a frame, with mats placed around for the family to sit on. In all of the houses are images of men of different shapes, and placed as ornaments in the parts of the house where they are most seen. They gave us nuts, berries, and some dried fish to eat, and we purchased, among other articles, a hat made after their own taste, such as they wear, without a brim. They ask high prices for all that they sell, observing that the whites below pay dearly for all which they carry there. We cannot learn precisely the nature of the trade carried on by the Indians with the inhabitants below. But as their knowledge of the whites seems to be very imperfect, and the only articles which they carry to market, such as pounded fish, bear-grease and roots, cannot be an object of much foreign traffic, their intercourse appears to be an intermediate trade with the natives near the mouth of the Columbia; from them these people obtain in exchange for their fish, roots, and bear-grease, blue and white beads, copper tea-kettles, brass arm-bands, some scarlet and blue robes, and a few articles of old European clothing. But their great object is to obtain beads, an article which holds the first place in their ideas of relative value, and to procure which they will sacrifice their last article of clothing or the last mouthful of food. Independently of their fondness for them as an ornament, these beads are the medium of trade, by which they obtain from the Indians still higher up the river, robes, skins, chapelet bread, bear-grease, &c. Those Indians in turn, employ them to procure from the Indians in the Rocky mountains, bear-grease, pachico, roots, robes, &c.

These Indians are rather below the common size, with high cheek-bones, their noses pierced, and in full dress ornamented with a tapering piece of white shell or wampum, about two inches long. Their eyes are exceedingly sore and weak, many of them have only a single eye, and some are perfectly blind; their teeth prematurely decayed, and in frequent instances, altogether worn away. Their general health, however, seems to be good, the only disorder we have remarked, being tumours in different parts of the body. The women are small and homely in their appearance, their legs and thighs much swelled, and their knees remarkably large; deformities, which are no doubt owing to the manner in which they sit on their hams. They go nearly naked, having only a piece of leather tied round the breast, falling thence, nearly

as low as the waist; a small robe about three feet square, and a piece of leather, which ill supplies the place of a cover, tied between their legs. Their hair is suffered to hang loose in every direction; and in their persons, as well as in their cookery, they are filthy to a most disgusting degree. We here observe that the women universally have their heads flattened, and in many of the villages, we have lately seen the female children undergo the operation.

CHAP. XX.

FIRST APPEARANCE OF TIDE WATER IN THE COLUMBIA RIVER—DESCRIPTION OF THE QUICKSAND RIVER—SOME ACCOUNT OF THE SKILLOOT INDIANS—THE PARTY PASS THE RIVER COWELISKE—SOME ACCOUNT OF THE WASHKIAM INDIANS—ARRIVAL ON THE BORDERS OF THE PACIFIC—DISAGREEABLE AND CRITICAL SITUATION OF THE PARTY WHEN FIRST ENCAMPED—THEIR DISTRESS OCCASIONED BY THE INCESSANT TORRENTS OF RAIN—EXPOSED FOR THIRTY DAYS TO THIS DRENCHING DELUGE, DURING WHICH TIME THEIR PROVISIONS ARE SPOILED, AND MOST OF THEIR FEW ARTICLES OF MERCHANDISE DESTROYED—DISTRESS OF THE PARTY—ADVENTURE OF SHANNON AND HIS DANGER FROM THE WASHKIAM—DIFFICULTY OF FINDING A PLACE SUITABLE FOR A PERMANENT ENCAMPMENT—VISITED BY SEVERAL INDIANS OF DIFFERENT TRIBES, ON WHOM MEDALS ARE BESTOWED.

SATURDAY, November 2. WE now examined the rapid below more particularly, and the danger appearing to be too great for the loaded canoes, all those who could not swim were sent with the baggage by land. The canoes then passed safely, and were reloaded; at the foot of the rapid we took a meridian altitude of $59^{\circ} 45' 45''$. Just as we were setting out seven squaws arrived across the portage loaded with dried fish and bear-grease, neatly packed in bundles, and soon after four Indians came down the rapid in a large canoe. After breakfasting we left our camp at one o'clock, passed the upper point of an island which is separated from the right shore by a narrow channel, through which in high tides the water passes. But at present it contains no running water, and a creek which falls into it from the mountains on the right, is in the same dry condition, though it has the marks of discharging immense torrents at some seasons. The island thus made is three miles in length, and about one in width; its situation is high and open, the land rich, and at this time covered with grass and a great number of strawberry vines, from which we gave it the name of Strawberry Island. In several places we observed that the Indians had been

digging for roots, and indeed the whole island bears every appearance of having been at some period in a state of cultivation. On the left side of the river the low ground is narrow and open: the rapid which we have just passed is the last of all the descents of the Columbia. At this place the first tide-water commences, and the river in consequence widened immediately below the rapid. As we descended, we reached at the distance of one mile from the rapid a creek under a bluff on the left; at three miles is the lower point of Strawberry Island. To this immediately succeed three small islands covered with wood; in the meadow to the right, and at some distance from the hills, stands a high perpendicular rock, about eight hundred feet high, and four hundred yards round the base; this we called the Beacon rock. Just below is an Indian village of nine houses, situated between two small creeks.

At this village the river widens to nearly a mile in extent, the low grounds too become wider, and they as well as the mountains on each side are covered with pine, spruce-pine, cottonwood, a species of ash, and some alder. After being so long accustomed to the dreary nakedness of the country above, the change is as grateful to the eye, as it is useful in supplying us with fuel. Four miles from the village is a point of land on the right, where the hills become lower, but are still thickly timbered. The river is now about two miles wide, the current smooth and gentle, and the effect of the tide has been sensible since leaving the rapid. Six miles lower is a rock rising from the middle of the river to the height of one hundred feet, and about eighty yards at its base. We continued six miles further, and halted for the night under a high projecting rock on the left side of the river opposite the point of a large meadow. The mountains, which, from the great shoot to this place, are high, rugged, and thickly covered with timber, chiefly of the pine species, here leave the river on each side; the river becomes two and a half miles in width, and the low grounds are extensive and well supplied with wood. The Indians, whom we left at the portage, passed us, on their way down the river, and seven others who were descending in a canoe for the purpose of trading below, encamped with us. We had made from the foot of the great shoot twenty-nine miles to-day. The ebb-tide rose at our camp about nine inches, the flood must rise much higher. We saw great numbers of water-fowl, such as swan, geese, ducks of various kinds, gulls, plover, and the white and grey brant, of which last we killed eighteen.

Sunday, 3. We were detained until ten o'clock by a fog so thick that a man could not be discerned at the distance of fifty steps. As soon as it cleared off we set out in company with our new Indian acquaintances, who came from a

village near the great Falls. The low grounds along the river are covered so thickly with rushes, vines, and other small growth, that they are almost impassable. At the distance of three miles we reached the mouth of a river on the left, which seemed to lose its waters in a sandbar opposite; the stream itself being only a few inches in depth. But on attempting to wade across, we discovered that the bed was a very bad quicksand, too deep to be passed on foot. We went up a mile and a half to examine this river, and found it to be at this distance a very considerable stream one hundred and twenty yards wide at its narrowest part, with several small islands. Its character resembles very much that of the river Platte. It drives its quicksand over the low grounds with great impetuosity, and such is the quantity of coarse sand which it discharges, that the accumulation has formed a large sandbar or island, three miles long, and a mile and a half wide, which divides the waters of the Quicksand river into two channels. This sand island compresses the Columbia within a space of half a mile, and throws its whole current against the right shore. Opposite to this river, which we call Quicksand river, is a large creek to which we gave the name of Seal river. The first appears to pass through the low country, at the foot of the high range of mountains towards the south-east, while the second, as well as all the large creeks on the right side of the Columbia, rises in the same ridge of mountains N. N. E. from this place. The mountain, which we have supposed to be the mount Hood of Vancouver, bears S. 85° E. about forty-seven miles from the mouth of the Quicksand river. After dinner we proceeded, and at the distance of three miles reached the lower mouth of Quicksand river. On the opposite side a large creek falls in near the head of an island, which extends for three miles and a half down the river; it is a mile and a half in width, rocky at the upper end, has some timber round its borders, but in the middle is open and has several ponds. Half a mile lower is another island in the middle of the river, to which from its appearance we gave the name of Diamond island. Here we met fifteen Indians ascending the river in two canoes, but the only information we could procure from them was, that they had seen three vessels, which we presume to be European, at the mouth of the Columbia. We went along its right side for three miles, and encamped opposite to it, after making to-day thirteen miles. A canoe soon after arrived from the village at the foot of the last rapid, with an Indian and his family, consisting of a wife, three children, and a woman who had been taken prisoner from the Snake Indians, living on a river from the south, which we afterwards found to be the Multnomah. Sacajawea was immediately introduced to her, in hopes that being a Snake Indian also, they might understand each other, but their language was not sufficiently intelligible to permit them to

converse together. The Indian had a gun with a brass barrel and cock, which he appeared to value very highly.

Below Quicksand river the country is low, rich, and thickly wooded on each side of the river: the islands have less timber, but are furnished with a number of ponds near which are vast quantities of fowls, such as swan, geese, brants, cranes, storks, white gulls, cormorants and plover. The river is wide, and contains a great number of sea otters.

In the evening the hunters brought in game for a sumptuous supper, which we shared with the Indians, both parties of whom spent the night with us.

Monday, 4. The weather was cloudy and cool, and the wind from the west. During the night, the tide rose eighteen inches near our camp. We set out about eight o'clock, and at the distance of three miles came to the lower end of Diamond island. It is six miles long, nearly three in width, and like the other islands, thinly covered with timber, and has a number of ponds or small lakes scattered over its surface. Besides the animals already mentioned we shot a deer on it this morning. Near the end of Diamond island are two others, separated by a narrow channel filled at high tides only, which continue on the right for the distance of three miles, and like the adjacent low grounds, are thickly covered with pine. Just below the last, we landed on the left bank of the river, at a village of twenty-five houses; all of these were thatched with straw, and built of bark, except one which was about fifty feet long, built of boards in the form of those higher up the river, from which it differed however, in being completely above ground, and covered with broad split boards; this village contains about two hundred men of the Skilloot nation, who seem well provided with canoes, of which there were at least fifty-two, and some of them very large, drawn up in front of the village. On landing we found the Indian from above, who had left us this morning, and who now invited us into a lodge of which he appeared to own a part. Here he treated us with a root, round in shape, and about the size of a small Irish potatoe, which they call wappatoo, it is the common arrowhead or sagittifolia, so much cultivated by the Chinese, and when roasted in the embers till it becomes soft, has an agreeable taste, and is a very good substitute for bread. After purchasing some more of this root, we resumed our journey, and at seven miles distance came to the head of a large island near the left. On the right shore is a fine open prairie for about a mile, back of which the country rises, and is supplied with timber, such as white oak, pine of different kinds, wild crab, and several species of undergrowth, while along the borders of the river, there are only a few cottonwood and ash trees. In this

prairie were also signs of deer and elk. When we landed for dinner, a number of Indians from the last village, came down for the purpose, as we supposed, of paying us a friendly visit, as they had put on their favourite dresses. In addition to their usual covering they had scarlet and blue blankets, sailors' jackets and trousers, shirts and hats. They had all of them either war axes, spears and bow arrows, or muskets and pistols, with tin powder flasks. We smoked with them and endeavoured to show them every attention, but we soon found them very assuming and disagreeable companions. While we were eating they stole the pipe with which they were smoking, and the great coat of one of the men. We immediately searched them all, and discovered the coat stuffed under the root of a tree near where they were sitting; but the pipe we could not recover. Finding us determined not to suffer any imposition, and discontented with them, they showed their displeasure in the only way which they dared, by returning in an ill humour to their village. We then proceeded and soon met two canoes with twelve men of the same Skilloot nation, who were on their way from below. The larger of the canoes was ornamented with the figure of a bear in the bow, and a man in the stern, both nearly as large as life, both made of painted wood, and very neatly fixed to the boat. In the same canoe were two Indians finely dressed, and with round hats. This circumstance induced us to give the name of Image-canoe to the large island, the lower end of which we now passed at the distance of nine miles from its head. We had seen two smaller islands to the right, and three more near its lower extremity. The Indians in the canoe here made signs that there was a village behind those islands, and indeed we presumed there was a channel on that side of the river, for one of the canoes passed in that direction between the small islands, but we were anxious to press forward, and therefore did not stop to examine more minutely. The river was now about a mile and a half in width, with a gentle current, the bottoms extensive and low, but not subject to be overflowed. Three miles below the Image canoe island we came to four large houses on the left side, at which place we had a full view of the mountain which we first saw on the 19th of October, from the Muscleshell rapid, and which we now find to be the mount St. Helen of Vancouver. It bears north 25° east, about ninety miles distant; it rises in the form of a sugar-loaf to a very great height, and is covered with snow. A mile lower we passed a single house on the left, and another on the right. The Indians had now learnt so much of us, that their curiosity was without any mixture of fear, and their visits became very frequent and troublesome. We therefore continued on till after night, in hopes of getting rid of them; but after passing a village on each side, which on account of the lateness of the hour we

saw indistinctly, we found there was no escaping from their importunities. We therefore landed at the distance of seven miles below Image-canoe island, and encamped near a single house on the right, having made during the day twenty-nine miles.

The Skilloots whom we passed to-day, speak a language somewhat different from that of the Echeloots or Chilluckittequaws near the Long Narrows. Their dress is similar, except that the Skilloots possess more articles procured from the white traders; and there is a further difference between them; inasmuch as the Skilloots, both males and females, have the head flattened. Their principal food is fish, and wappatoo roots, and some elk and deer, in killing which with their arrows, they seem very expert, for during the short time we remained at the village three deer were brought in. We also observed there a tame brairo.

As soon as we landed we were visited by two canoes loaded with Indians, from whom we purchased a few roots. The grounds along the river continue low and rich, and among the shrubs which cover them is a large quantity of vines resembling the raspberry. On the right the low grounds are terminated at the distance of five miles by a range of high hills covered with tall timber, and running south-east and north-west. The game, as usual, very abundant; and among other birds we observe some white geese with a part of their wings black.

Tuesday, 5. Our choice of a camp had been very unfortunate; for on a sand island opposite to us were immense numbers of geese, swan-ducks, and other wild fowl, who, during the whole night, serenaded us with a confusion of noises which completely prevented our sleeping. During the latter part of the night it rained, and we therefore willingly left our encampment at an early hour. We passed at three miles a small prairie, where the river is only three quarters of a mile in width, and soon after two houses on the left, half a mile distant from each other; from one of which three men came in a canoe merely to look at us, and having done so returned home. At eight miles we came to the lower point of an island, separated from the right side by a narrow channel, on which, a short distance above the end of the island, is situated a large village: it is built more compactly than the generality of the Indian villages, and the front has fourteen houses, which are ranged for a quarter of a mile along the channel. As soon as we were discovered, seven canoes came out to see us, and after some traffic, during which they seemed well-disposed and orderly, accompanied us a short distance below. The river here again widens to the space of a mile and a half. As we descended we soon observed, behind a sharp point of rocks, a channel a quarter of a mile wide, which we suppose must be the one taken by the

canoes yesterday on leaving Image-canoe island. A mile below the channel are some low cliffs of rocks, near which is a large island on the right side, and two small islands a little further on. Here we met two canoes ascending the river. At this place the shore on the right becomes bold and rocky, and the bank is bordered by a range of high hills covered with a thick growth of pine: on the other side is an extensive low island, separated from the left side by a narrow channel. Here we stopped to dine, and found the island open, with an abundant growth of grass, and a number of ponds well supplied with fowls; and at the lower extremity are the remains of an old village. We procured a swan, several ducks, and a brant, and saw some deer on the island. Besides this island, the lower extremity of which is seventeen miles from the channel just mentioned, we passed two or three smaller ones in the same distance. Here the hills on the right retire from the river, leaving a high plain, between which, on the left bank, a range of high hills running south-east and covered with pine, forms a bold and rocky shore. At the distance of six miles, however, these hills again return and close the river on both sides. We proceeded on, and at four miles reached a creek on the right, about twenty yards in width, immediately below which is an old village. Three miles further, and at the distance of thirty-two miles from our camp of last night, we halted under a point of high-land, with thick pine trees on the left bank of the river. Before landing we met two canoes, the largest of which had at the bow the image of a bear, and that of a man on the stern: there were twenty-six Indians on board, but they all proceeded upwards, and we were left, for the first time since we reached the waters of the Columbia, without any of the natives with us during the night. Besides the game already mentioned, we killed a grouse much larger than the common size, and observed along the shore a number of striped snakes. The river is here deep, and about a mile and a half in width. Here too the ridge of low mountains running north-west and south-east, cross the river, and form the western boundary of the plain through which we have just passed. This great plain or valley begins above the mouth of Quicksand river, and is about sixty miles wide in a straight line, while on the right and left it extends to a great distance: it is a fertile and delightful country, shaded by thick groves of tall timber, watered by small ponds, and running on both sides of the river. The soil is rich, and capable of any species of culture; but in the present condition of the Indians, its chief production is the wappatoo root, which grows spontaneously and exclusively in this region. Sheltered as it is on both sides, the temperature is much milder than that of the surrounding country; for even at this season of the year we observe very little appearance of frost. During its

whole extent it is inhabited by numerous tribes of Indians, who either reside in it permanently, or visit its waters in quest of fish and wappatoo roots: we gave it the name of the Columbia valley.

Wednesday, 6. The morning was cool, wet, and rainy. We proceeded at an early hour between the high hills on both sides of the river, till at the distance of four miles we came to two tents of Indians in a small plain on the left, where the hills on the right recede a few miles from the river, and a long narrow island stretches along the right shore. Behind this island is the mouth of a large river a hundred and fifty yards wide, and called by the Indians Coweliske. We halted for dinner on the island, but the red wood and green briars are so interwoven with the pine, alder, ash, a species of beech, and other trees, that the woods form a thicket, which our hunters could not penetrate. Below the mouth of the Coweliske a very remarkable knob rises from the water's edge to the height of eighty feet, being two hundred paces round the base; and as it is in a low part of the island, and some distance from the high grounds, the appearance of it is very singular. On setting out after dinner, we overtook two canoes going down to trade: one of the Indians, who spoke a few words of English, mentioned, that the principal person who traded with them was a Mr. Haley, and he shewed a bow of iron and several other things which he said Mr. Haley had given him. Nine miles below that river is a creek on the same; and between them three smaller islands; one on the left shore, the other about the middle of the river; and a third near the lower end of the long narrow island, and opposite a high cliff of black rocks on the left, sixteen miles from our camp. Here we were overtaken by the Indians from the two tents we passed in the morning, from whom we now purchased wappatoo roots, salmon, trout, and two beaver skins, for which last we gave five small fishhooks. At these cliffs the mountains, which had continued high and rugged on the left, retired from the river, and as the hills on the other side had left the water at the Coweliske, a beautiful extensive plain now presented itself before us. For a few miles we passed along side of an island a mile in width and three miles long, below which is a smaller island, where the high rugged hills, thickly covered with timber, border the right bank of the river, and terminate the low grounds: these were supplied with common rushes, grass, and nettles; in the moister parts with bullrushes and flags, and along the water's edge some willows. Here also were two ancient villages, now abandoned by their inhabitants, of whom no vestige remains, except two small dogs almost starved, and a prodigious quantity of fleas. After crossing the plain and making five miles, we proceeded through the hills for eight miles. The river is about a mile in width, and the

hills so steep that we could not for several miles find a place sufficiently level to suffer us to sleep in a level position : at length, by removing the large stones we cleared a place fit for our purpose above the reach of the tide, and after a journey of twenty-nine miles slept among the smaller stones under a mountain to the right. The weather was rainy during the whole day : we therefore made large fires to dry our bedding, and to kill the fleas, who have accumulated upon us at every old village we have passed.

Thursday, 7. The morning was rainy and the fog so thick that we could not see across the river. We observed, however, opposite to our camp, the upper point of an island, between which and the steep hills on the right we proceeded for five miles. Three miles lower is the beginning of an island separated from the right shore by a narrow channel ; down this we proceeded under the direction of some Indians whom we had just met going up the river, and who returned in order to show us their village. It consists of four houses only, situated on this channel behind several marshy islands formed by two small creeks. On our arrival they gave us some fish, and we afterwards purchased wappatoo roots, fish, three dogs, and two otter skins, for which we gave fish-hooks chiefly, that being an article of which they are very fond.

These people seem to be of a different nation from those we have just passed : they are low in stature, ill shaped, and all have their heads flattened. They call themselves Wahkiacum, and their language differs from that of the tribes above, with whom they trade for wappatoo roots. The houses too are built in a different style, being raised entirely above ground, with the eaves about five feet high, and the door at the corner. Near the end opposite to this door is a single fireplace, round which are the beds, raised four feet from the floor of earth ; over the fire are hung the fresh fish, and when dried they are stowed away with the wappatoo roots under the beds. The dress of the men is like that of the people above, but the women are clad in a peculiar manner, the robe not reaching lower than the hip, and the body being covered in cold weather by a sort of corset of fur, curiously plaited, and reaching from the arms to the hip ; added to this is a sort of petticoat, or rather tissue of white cedar bark, bruised or broken into small strands, and woven into a girdle by several cords of the same materials. Being tied round the middle, these strands hang down as low as the knee in front, and to midleg behind, and are of sufficient thickness to answer the purpose of concealment whilst the female stands in an erect position, but in any other attitude is but a very ineffectual defence. Sometimes the tissue is formed of strings of silk grass, twisted and knotted at the end.

After remaining with them about an hour, we proceeded down the channel

with an Indian dressed in a sailor's jacket, for our pilot, and on reaching the main channel were visited by some Indians who have a temporary residence on a marshy island in the middle of the river, where is a great abundance of water-fowl. Here the mountainous country again approaches the river on the left, and a higher mountain is distinguished towards the south-west. At a distance of twenty miles from our camp we halted at a village of Wahkiacums, consisting of seven ill-looking houses, built in the same form with those above, and situated at the foot of the high hills on the right, behind two small marshy islands. We merely stopped to purchase some food and two beaver skins, and then proceeded. Opposite to these islands the hills on the left retire, and the river widens into a kind of bay crowded with low islands, subject to be overflowed occasionally by the tide. We had not gone far from this village when the fog cleared off, and we enjoyed the delightful prospect of the ocean; that ocean, the object of all our labours, the reward of all our anxieties. This cheering view exhilarated the spirits of all the party, who were still more delighted on hearing the distant roar of the breakers. We went on with great cheerfulness under the high mountainous country which continued along the right bank; the shore was however so bold and rocky, that we could not, until after going fourteen miles from the last village, find any spot fit for an encampment. At that distance, having made during the day thirty-four miles, we spread our mats on the ground, and passed the night in the rain. Here we were joined by our small canoe, which had been separated from us during the fog this morning. Two Indians from the last village also accompanied us to the camp, but, having detected them in stealing a knife, they were sent off.

Friday, 8. It rained this morning; and having changed the clothing which had been wetted during yesterday's rain, we did not set out till nine o'clock. Immediately opposite our camp is a rock at the distance of a mile in the river, about twenty feet in diameter and fifty in height, and towards the south-west some high mountains, one of which is covered with snow at the top. We proceeded past several low islands in the bay or bend of the river to the left, which is here five or six miles wide. We were here overtaken by three Indians in a canoe, who had a salmon to sell. On the right side we passed an old village, and then, at the distance of three miles, entered an inlet or niche, about six miles across, and making a deep bend of nearly five miles into the hills on the right shore, where it receives the waters of several creeks. We coasted along this inlet, which, from its little depth, we called Shallow bay, and at the bottom of it halted to dine near the remains of an old village, from which, however, we kept at a cautious distance, as it was occupied by great numbers of fleas. At

this place we observed a number of fowl, among which we killed a goose and two ducks, exactly resembling in appearance and flavour the canvassback duck of the Susquehannah. After dinner the three Indians left us, and we then took advantage of the returning tide, to go on about three miles to a point on the right, eight miles distant from our camp; but here the waves ran so high, and dashed about our canoes so much, that several of the men became sea-sick. It was therefore judged imprudent to go on in the present state of the weather, and we landed at the point. The situation was extremely uncomfortable; the high hills jutted in so closely that there was not room for us to lie level, nor to secure our baggage free from the tide; and the water of the river is too salt to be used; but the waves increasing every moment so much, that we could not move from the spot with safety: we therefore fixed ourselves on the beach left by the ebb-tide, and having raised the baggage on poles, passed a disagreeable night, the rain during the day having wetted us completely, as indeed we have been for some days past.

Saturday, 9. Fortunately for us, the tide did not rise as high as our camp during the night; but being accompanied by high winds from the south, the canoes, which we could not place beyond its reach, were filled with water, and were saved with much difficulty: our position was very uncomfortable, but as it was impossible to move from it, we waited for a change of weather. It rained, however, during the whole day, and at two o'clock in the afternoon, the flood tide set in, accompanied by a high wind from the south, which, about four o'clock, shifted to the south-west, and blew almost a gale directly from the sea. The immense waves now broke over the place where we were encamped, and the large trees, some of them five or six feet thick, which had lodged at the point, were drifted over our camp, and the utmost vigilance of every man could scarcely save our canoes from being crushed to pieces. We remained in the water and drenched with rain during the rest of the day; our only food being some dried fish, and some rain water which we caught. Yet, though wet and cold, and some of them sick from using the salt water, the men are cheerful, and full of anxiety to see more of the ocean. The rain continued all night, and,

Sunday, 10th, the following morning, the wind having lulled, and the waves not being so high, we loaded our canoes and proceeded. The mountains on the right are high, covered with timber, chiefly pine, and descend in a bold and rocky shore to the water. We went through a deep niche and several inlets on the right, while on the opposite side is a large bay, above which the hills are close on the river. At the distance of ten miles the wind rose from the north-

rest, and the waves became so high that we were forced to return for two miles to a place where we could with safety unload. Here we landed at the mouth of a small run, and having placed our baggage on a pile of drifted logs waited until low water. The river then appeared more calm: we therefore started, but after going a mile found the waves too high for our canoes and were obliged to put to shore. We unloaded the canoes, and having placed the baggage on a rock above the reach of the tide, encamped on some drift logs which formed the only place where we could lie, the hills rising steep over our heads to the height of five hundred feet. All our baggage as well as ourselves was thoroughly wetted with the rain, which did not cease during the day; it continued violently during the night, in the course of which the tide reached the logs on which we lay, and set them afloat.

Monday, 11. The wind was still high from the south-west, and drove the waves against the shore with great fury: the rain too fell in torrents, and not only drenched us to the skin, but loosened the stones on the hill sides, which then came rolling down upon us. In this comfortless situation we remained all day, wet, cold, with nothing but dried fish to satisfy our hunger; the canoes in one place at the mercy of the waves; the baggage in another, and all the men scattered on floating logs, or sheltering themselves in the crevices of the rocks and hill sides. A hunter was despatched in hopes of finding some fresh meat, but the hills were so steep, and covered with undergrowth and fallen timber, that he could not penetrate them, and he was forced to return. About twelve o'clock we were visited by five Indians in a canoe: they came from above this place on the opposite side of the river, and their language much resembles that of the *Wahkiacum*: they called themselves *Cathlamahs*. In person they are small, ill made, and badly clothed; though one of them had on a sailor's round jacket and pantaloons, which, as he explained by signs, he had received from the whites below the point: we purchased from them thirteen red charr, a fish which we found very excellent. After some time they went on board the boat, and crossed the river, which is here five miles wide, through a very heavy sea.

Tuesday, 12. About three o'clock a tremendous gale of wind arose, accompanied with lightning, thunder, and hail: at six it became light for a short time, but a violent rain soon began and lasted during the day. During this storm one of our boats, secured by being sunk with great quantities of stone, got loose, but drifting against a rock, was recovered without having received much injury. Our situation became now much more dangerous, for the waves were driven with fury against the rocks and trees, which till now had afforded us

refuge: we therefore took advantage of a low tide, and moved about half a mile round a point to a small brook, which we had not observed till now, on account of the thick bushes and driftwood which concealed its mouth. Here we were more safe; but still cold and wet, our clothes and bedding rotten as well as wet, our baggage at a distance, and the canoes, our only means of escape from this place, at the mercy of the waves: we were, however, fortunate enough to enjoy good health, and even had the luxury of getting some fresh salmon and three salmon trout in the brook. Three of the men attempted to go round a point in our small Indian canoe, but the high waves rendered her quite unmanageable; these boats requiring the seamanship of the natives themselves to make them live in so rough a sea.

Wednesday, 13. During the night we had short intervals of fair weather, but it began to rain in the morning, and continued through the day. In order to obtain a view of the country below, captain Clarke followed up the course of the brook, and with much fatigue, and after walking three miles, ascended the first spur of the mountains. The whole lower country was covered with almost impenetrable thickets of small pine, with which is mixed a species of plant resembling arrow wood, twelve or fifteen feet high, with a thorny stem, almost interwoven with each other, and scattered among the fern and fallen timber: there is also a red berry, somewhat like the Solomon's seal, which is called by the natives, *solme*, and used as an article of diet. This thick growth rendered travelling almost impossible, and it was rendered more fatiguing by the steepness of the mountain, which was so great as to oblige him to draw himself up by means of the bushes. The timber on the hills is chiefly of a large tall species of pine, many of them eight or ten feet in diameter at the stump, and rising sometimes more than one hundred feet in height. The hail, which fell two nights since, is still to be seen on the mountains; there was no game, and no traces of any, except some old signs of elk: the cloudy weather prevented his seeing to any distance, and he therefore returned to camp, and sent three men in the Indian canoe to try if they could double the point and find some safer harbour for our canoes. At every flood-tide the sea breaks in great swells against the rocks, and drifts the trees among our establishment, so as to render it very insecure. We were confined as usual to dried fish, which is our last resource.

Thursday, 14. It rained without intermission during last night and to-day: the wind too is very high, and one of our canoes much injured by being dashed against rocks. Five Indians from below came to us in a canoe, and three of them having landed, informed us they had seen the men sent down yesterday.

At this moment one of them arrived, and informed us that these Indians had stolen his gig and basket: we therefore ordered the two women who remained in the canoe, to restore them; but this they refused, till we threatened to shoot, when they gave back the articles, and we then ordered them to leave us. They were of the Wabkiacum nation. The man now informed us that they had gone round the point as far as the high sea would suffer them, in the canoe, and then landed, and that in the night he had separated from his companions, who had gone further down: that at no great distance from where we are is a beautiful sand beach and a good harbour. Captain Lewis concluded to examine more minutely the lower part of the bay, and taking one of the large canoes was landed at the point, whence he proceeded by land with four men, and the canoe returned nearly filled with water.

Friday, 15. It continued raining all night, but in the morning the weather became calm and fair: we therefore began to prepare for setting out, but before we were ready a high wind sprang up from the south-east, and obliged us to remain. The sun shone until one o'clock, and we were thus enabled to dry our bedding and examine our baggage. The rain, which has continued for the last ten days without an interval of more than two hours, has completely wetted all our merchandise, and spoiled some of our fish, destroyed the robes, and rotted nearly one half of our few remaining articles of clothing, particularly the leather dresses. About three o'clock the wind fell, and we instantly loaded the canoes, and left the miserable spot to which we have been confined the last six days. On turning the point we came to the sand beach, through which runs a small stream from the hills; at the mouth of which is an ancient village of thirty-six houses, which has at present no inhabitants except fleas. Here we met Shannon, who had been sent back to meet us by captain Lewis. The day Shannon left us in the canoe, he and Willard proceeded on till they met a party of twenty Indians, who never having heard of us, did not know where they came from: they however behaved with so much civility, and seemed so anxious that the men should go with them towards the sea, that their suspicions were excited, and they declined going on: the Indians, however, would not leave them; and the men being confirmed in their suspicions, and fearful if they went into the woods to sleep they would be cut to pieces in the night, thought it best to pass the night in the midst of the Indians; they therefore made a fire, and after talking with them to a late hour, laid down with their rifles under their heads. As they awoke this morning they found that the Indians had stolen and concealed their guns: having demanded them in vain, Shannon seized a club, and was about assaulting one of the Indians whom he suspected as a thief, when another Indian began to load a

fowling piece with an intention of shooting him. He therefore stopped and explained by signs, that if they did not give up the guns, a large party would come down the river before the sun rose to such a height, and put every one of them to death. Fortunately, captain Lewis and his party appeared at this time, and the terrified Indians immediately brought the guns, and five of them came on with Shannon. To these men we declared, that if ever any of their nation stole any thing from us he should be instantly shot. They reside to the north of this place, and speak a language different from that of the people higher up the river. It was now apparent that the sea was at all times too rough for us to proceed further down the bay by water: we therefore landed, and having chosen the best spot we could select, made our camp of boards from the old village. We were now situated comfortably, and being visited by four Wahkiacums with wappatoo roots, were enabled to make an agreeable addition to our food.

Saturday, 16. The morning was clear and beautiful. We therefore put out all our baggage to dry, and sent several of the party to hunt. Our camp is in full view of the ocean, on the bay laid down by Vancouver, which we distinguish by the name of Haley's bay, from a trader who visits the Indians here, and is a great favourite among them. The meridian altitude of this day gave $46^{\circ} 19' 11'' \frac{7}{10}$ as the latitude of our camp. The wind was strong from the southwest, and the waves very high, yet the Indians were passing up and down the bay in canoes, and several of them encamped near us. We smoked with them, but after our recent experience of their thievish disposition, treated them with caution. Though so much exposed to the bad weather, none of the party have suffered, except one, who has a violent cold, in consequence of sleeping for several nights in wet leather. The hunters brought in two deer, a crane, some geese and ducks, and several brant, three of which were white, except a black part of the wing, and much larger than the grey brant, which is itself a size beyond the duck.

Sunday, 17. A fair cool morning and easterly wind. The tide rises at this place eight feet six inches in height, and rolls over the beach in great waves.

About one o'clock captain Lewis returned, after having coasted down Haley's bay to Cape Disappointment, and some distance to the north along the sea coast. He was followed by several Chinnocks, among whom were the principal chief and his family. They made us a present of a boiled root, very much like the common liquorice in taste and size, and called culwhamo: in return we gave double the value of their present, and now learnt the danger of accepting any thing from them, since no return, even if ten times the value of their gift, can satisfy them. We were chiefly occupied in hunting, and were able to procure three deer, four brant, and two ducks, and also saw some signs of elk.

Captain Clarke now prepared for an excursion down the bay, and accordingly started,

Monday, 18, at daylight, accompanied by eleven men. He proceeded along the beach one mile to a point of rocks about forty feet high, where the hills retire, leaving a wide beach, and a number of ponds covered with water-fowl, between which and the mountain is a narrow bottom of alder and small balsam trees. Seven miles from the rocks is the entrance of a creek, or rather drain from the ponds and hills, where is a cabin of Chinnooks. The cabin contained some children, and four women, one of whom was in a most miserable state, covered with ulcers, proceeding, as we imagine, from the venereal disease, with which several of the Chinnooks we have seen appear to be afflicted. We were taken across in a canoe by two squaws, to each of whom we gave a fishhook, and then coasting along the bay, passed at two miles the low bluff of a small hill, below which are the ruins of some old huts, and close to it the remains of a whale. The country is low, open, and marshy; interspersed with some high pine and a thick undergrowth. Five miles from the creek, we came to a stream forty yards wide at low water, which we called Chinnook river. The hills up this river and towards the bay are not high, but very thickly covered with large pine of several species: in many places pine trees, three or four feet in thickness, are seen growing on the bodies of large trees, which, though fallen and covered with moss, were in part sound. Here we dined on some brant and plover, killed as we came along, and after crossing in a boat lying in the sand near some old houses, proceeded along a bluff of yellow clay and soft stone to a little bay or harbour, into which a drain from some ponds empties: at this harbour the land is low, but as we went on it rose to hills of eighty or ninety feet above the water. At the distance of one mile is a second bay, and a mile beyond it a small rocky island in a deep bend, which seems to afford a very good harbour, and where the natives inform us European vessels anchor for the purpose of trading. We went on round another bay, in which is a second small island of rocks, and crossed a small stream, which rises in a pond near the sea coast, and after running through a low isthmus empties into the bay. This narrow low ground, about two or three hundred yards wide, separates from the main hills a kind of peninsula, the extremity of which is two miles from the anchoring place; and this spot, which was called Cape Disappointment, is an elevated, circular knob, rising with a steep ascent one hundred and fifty or one hundred and sixty feet above the water, formed like the whole shore of the bay, as well as of the sea-coast, and covered with thick timber on the inner side, but open and grassy in the exposure next the sea. From this cape a high point of land bears south

20° west, about twenty-five miles distant. In the range between these two eminences, is the opposite point of the bay, a very low ground, which has been variously called Cape Rond by La Perouse, and Point Adams by Vancouver. The water for a great distance off the mouth of the river, and within the mouth nearest to Point Adams, is a large sandbar, almost covered at high tide. We could not ascertain the direction of the deepest channel, for the waves break with tremendous force the whole distance across the bay, but the Indians point nearer to the opposite side as the best passage. After remaining for some time on this elevation, we descended across the low isthmus, and reached the ocean at the foot of a high hill, about a mile in circumference, and projecting into the sea. We crossed this hill, which is open, and has a growth of high coarse grass, and encamped on the north side of it, having made nineteen miles. Besides the pounded fish and brant, we had for supper a flounder, which we picked up on the beach.

Tuesday, 19. In the night it began to rain, and continued till eleven o'clock. Two hunters were sent out to kill something for breakfast, and the rest of the party, after drying their blankets, soon followed. At three miles we overtook the hunters, and breakfasted on a small deer, which they had been fortunate enough to kill. This, like all those we have seen on this coast, are much darker than our common deer. Their bodies, too, are deeper, their legs shorter, and their eyes larger. The branches of the horns are similar, but the upper part of the tail is black, from the root to the end, and they do not leap, but jump like a sheep frightened. We then continued over rugged hills and steep hollows, near the sea, on a course about north 20° west, in a direct line from the cape, till at the distance of five miles, we reached a point of high land, below which a sandy beach extends, in a direction north 10° west, to another high point about twenty miles distant. This eminence we distinguished by the name of Point Lewis. It is there that the highlands, which at the commencement of the sandy beach, recede towards Chinook river, again approach the ocean. The intermediate country is low, with many small ponds, crowded with birds, and watered by the Chinook, on the borders of which resides the nation of the same name. We went four miles along the sandy beach to a small pine tree, on which captain Clarke marked his name, with the year and day, and then returned to the foot of the hills, passing on the shore a sturgeon ten feet long, and several joints of the back bone of a whale, both which seem to have been thrown ashore and foundered. After dining on the remains of the small deer, we crossed in a south-eastern direction to the bay, where we arrived at the distance of two miles, then continued along the bay, crossed Chinook river, and encamped on its upper side, in a sandy bottom.

Wednesday 20. It rained in the course of the night. A hunter, despatched early to kill some food, returned with eight ducks, on which we breakfasted, and then followed the course of the bay to the creek or outlet of the ponds. It was now high tide, the stream three hundred yards wide, and no person in the cabin to take us across. We therefore made a small raft, on which one of the men passed and brought a canoe to carry us over. As we went along the beach, we were overtaken by several Indians, who gave us dried sturgeon and wap-patoo roots, and soon met several parties of Chinooks returning from the camp. When we arrived there we found many Chinooks, and two of them being chiefs, we went through the ceremony of giving to each a medal, and to the most distinguished a flag. Their names were Concommoly and Chillalawill. One of the Indians had a robe made of two sea-otter skins, the fur of which was the most beautiful we had ever seen; the owner resisted every temptation to part with it, but at length could not resist the offer of a belt of blue beads which Chaboneau's wife wore round her waist. During our absence the camp had been visited by many Indians, and the men who had been employed in hunting killed several deer, and a variety of wild fowls.

Thursday 21. The morning was cloudy, and from noon till night it rained. The wind too was high from the south-east, and the sea so rough that the water reached our camp. Most of the Chinooks returned home, but we were visited in the course of the day by people of different bands in the neighbourhood, among whom are the Chiltz, a nation residing on the sea-coast near Point Lewis, and the Clatsops, who live immediately opposite on the south side of the Columbia. A chief from the Grand Rapid also came to see us, and we gave him a medal. To each of our visitors we made a present of a small piece of riband, and purchased some cranberries and some articles of their manufacture, such as mats and household furniture, for all which we paid high prices. After we had been relieved from these Indians, we were surprised at a visit of a different kind; an old woman who is the wife of a Chinook chief came with six young women, her daughters and nieces, and having deliberately encamped near us, proceeded to cultivate an intimacy between our men and her fair wards.

CHAP. XXI.

EXTRAVAGANT PASSION OF THE NATIVES FOR BLUE BEADS, WHICH CONSTITUTE AMONGST THEM THE CIRCULATING MEDIUM OF THE COUNTRY—THE PARTY STILL IN SEARCH OF A SUITABLE PLACE FOR WINTER QUARTERS—STILL SUFFERING FROM THE CONSTANT DELUGES OF RAIN—ARE VISITED BY THE INDIANS, WITH WHOM THEY TRAFFIC BUT LITTLE, ON ACCOUNT OF THE EXTRAVAGANT PRICES THEY ASK FOR EVERY ARTICLE—RETURN OF CAPTAIN LEWIS, WHO REPORTS THAT HE HAS FOUND A SUITABLE PLACE FOR WINTER QUARTERS—THE RAIN STILL CONTINUES—THEY PREPARE TO FORM AN ENCAMPMENT ON A POINT OF HIGHLAND ON THE BANKS OF THE RIVER NEUTEL—CAPTAIN CLAKE GOES WITH A PARTY TO FIND A PLACE SUITABLE FOR THE MANUFACTURE OF SALT—HE IS HOSPITABLY ENTERTAINED BY THE CLATSOPS—THIS TRIBE ADDICTED TO THE VICE OF GAMBLING—SICKNESS OF SOME OF THE PARTY, OCCASIONED BY THE INCESSANT RAINS—THEY FORM, NOTWITHSTANDING, A PERMANENT ENCAMPMENT FOR THEIR WINTER QUARTERS.

FRIDAY, 22. It rained during the whole night, and about daylight a tremendous gale of wind rose from the S. S. E. and continued during the whole day with great violence. The sea runs so high that the water comes into our camp, which the rain prevents us from leaving. We purchased from the old squaw for armbands and rings, a few wappattoo roots, on which we subsisted. They are nearly equal in flavour to the Irish potatoe, and afford a very good substitute for bread. The bad weather has driven several Indians to our camp, but they are still under the terrors of the threat which we made on first seeing them, and now behave with the greatest decency.

Saturday, 23. The rain continued through the night, but the morning was calm and cloudy. The hunters were sent out and killed three deer, four brant, and three ducks. Towards evening seven Clatsops came over in a canoe with two skins of the sea-otter. To this article they attach an extravagant value, and their demands for it were so high that we were fearful of reducing our small stock of merchandise, on which we must depend for subsistence as we return,

to venture on purchasing. To ascertain however their ideas as to the value of different objects, we offered for one of the skins a watch, a handkerchief, an American dollar, and a bunch of red beads; but neither the curious mechanism of the watch, nor even the red beads could tempt him: he refused the offer, but asked for tiacomoshack or chief beads, the most common sort of coarse blue-coloured beads, the article beyond all price in their estimation. Of these blue beads we have but few, and therefore reserve them for more necessitous circumstances.

Sunday, 24. The morning being fair, we dried our wet articles and sent out the hunters, but they returned with only a single brant. In the evening a chief and several men of the Chinooks came to see us; we smoked with them, and bought a sea-otter skin for some blue beads. Having now examined the coast, it becomes necessary to decide on the spot for our wintering quarters. The people of the country subsist chiefly on dried fish and roots, but of these there does not seem to be a sufficient quantity for our support, even were we able to purchase, and the extravagant prices, as well as our small store of merchandise, forbid us to depend on that resource. We must therefore rely for subsistence on our arms, and be guided in the choice of our residence by the abundance of game which any particular spot may offer. The Indians say that the deer is most numerous at some distance above on the river, but that the country on the opposite side of the bay is better supplied with elk, an animal much larger and more easily killed than deer, with a skin better fitted for clothing, and the meat of which is more nutritive during the winter, when they are both poor. The climate too is obviously much milder here than above the first range of mountains, for the Indians are thinly clad, and say they have little snow; indeed since our arrival the weather has been very warm, and sometimes disagreeably so: and dressed as we are altogether in leather, the cold would be very unpleasant if not injurious. The neighbourhood of the sea is moreover recommended by the facility of supplying ourselves with salt, and the hope of meeting some of the trading vessels, which are expected in about three months, and from which we may procure a fresh supply of trinkets for our route homewards. These considerations induced us to determine on visiting the opposite side of the bay, and if there was an appearance of much game to establish ourselves there during the winter. Next day,

Monday, 25, however, the wind was too high to suffer us to cross the river, but as it blew generally from the east south-east, the coast on the north was in some degree sheltered by the highlands. We therefore set out, and keeping

near the shore, halted for dinner in the shallow bay, and after dark, reached a spot near a rock, at some distance in the river, and close to our former camp of the 7th inst. On leaving our camp, seven Clatsops accompanied us in a canoe, but after going a few miles crossed the bay through immense high waves, leaving us in admiration, at the dexterity with which they threw aside each wave as it threatened to come over their canoe. The evening was cloudy, and in the morning,

Tuesday, 26, it rained. We set out with the wind from east north-east, and a short distance above the rock, near our camp, began to cross the river. We passed between some low, marshy islands, which we called the Seal islands, and reached the south side of the Columbia at a bottom three miles below a point, to which we gave the name of point Samuel. After going along the shore for five miles, we entered a channel two hundred yards in width, which separates from the main land a large, but low island. On this channel, and at the foot of some highlands, is a village, where we landed. It consists of nine large wooden houses, inhabited by a tribe called Cathlamahs, who seem to differ neither in dress, language, nor manners, from the Chinooks and Wahkiacums: like whom they live chiefly on fish and wappatoo roots. We found, however, as we hoped, some elk meat: after dining on some fresh fish and roots, which we purchased from them at an immoderate price, we coasted along a deep bend of the river towards the south, and at night encamped under a high hill. All the way from the village the land is high, and has a thick growth of pine balsam, and other timber; but as it was still raining very hard, it was with difficulty we procured wood enough to make fires. Soon after we landed, three Indians from the Cathlawah village came down with wappatoo roots some of which we purchased with fish-hooks. At daylight the next morning,

Wednesday, 27, eleven more came down with provisions, skins and mats for sale, but the prices were too high for our reduced finances, and we bought nothing. As we were preparing to set out we missed an axe, which was found under the robe of one of the Indians, and they were all prohibited in consequence from following us. We went on in the rain, which had continued through the night, and passing between a number of islands came to a small river, called by the Indians Kekemalke. We afterwards came to a very remarkable knob of land, projecting about a mile and a half towards Shallow bay, and about four miles round, while the neck of land which connects it to the main shore is not more than fifty yards wide. We went round this projection, which we named point William; but the waves then became so high that we could not venture any

farther, and we therefore landed on a beautiful shore of pebbles of various colours, and encamped near an old Indian hut on the isthmus. In drawing our canoes in shore, we had the misfortune to make a split two feet long in one of them. This isthmus opposed a formidable barrier to the sea, for we now found that the water below is salt, while that above is fresh and well tasted. It rained hard during the whole day ; it continued all night, and in the morning,

Thursday 28, began more violently, attended with a high wind from the south-west. It was now impossible to proceed on so rough a sea. We therefore sent several men to hunt, and the rest of us remained during the day, in a situation the most cheerless and uncomfortable. On this little neck of land we are exposed with a miserable covering, which does not deserve the name of a shelter to the violence of the winds ; all our bedding and stores, as well as our bodies, are completely wet, our clothes rotting with constant exposure, and no food, except the dried fish brought from the Falls, to which we are again reduced. The hunters all returned hungry, and drenched with rain, having seen neither deer nor elk, and the swan and brant too shy to be approached. At noon the wind shifted to the north-west, and blew with such tremendous fury, that many trees were blown down near us. This gale lasted with short intervals during the whole night ; but towards morning,

Friday, 29th, the wind lulled, though the rain continued, and the waves were still high. Captain Lewis took the Indian canoe, which is better calculated for rough weather, and with five men went down to a small bay below us, where we expect to find elk. Three other men set out at the same time to hunt in different directions, and the rest remained round the smoke of our fires drying leather, in order to make some new clothes. The night brought only a continuation of rain and hail, with short intervals of fair weather, till in the morning,

Saturday, 30th, it cleared up about nine o'clock, and the sun shone for several hours. Other hunters were now sent out, and we passed the remainder of the day in drying our merchandise so long exposed. Several of the men complain of disorders in their bowels, which can be ascribed only to their diet of pounded fish mixed with saltwater ; and they are therefore directed to use for its correction, the fresh water above the point. The hunters had seen three elk, but could not obtain any of them : they, however, brought in three hawks and a few black ducks, of a species common in the United States, living in large flocks, and feeding on grass : they are distinguished by a sharp white beak, toes separated, and by having no craw. Besides these wild fowls, there are in this neighbourhood a large kind of buzzard with white wings, the grey and the bald

eagle, the large red-tailed hawk, the blue magpye, and great numbers of ravens and crows. We observe, however, few small birds, the one which has most attracted our attention being a small brown bird, which seems to frequent logs and the roots of trees. Of other animals there is a great abundance. We see great quantities of snakes, lizards, worms, and spiders, as well as small bugs, flies, and insects of different kinds. The vegetable productions are also numerous. The hills along the coast are high and steep, and the general covering is a growth of lofty pines of different species, some of which rise more than two hundred feet, and are ten or twelve feet in diameter near the root. Beside these trees we observe on the point a species of ash, the alder, the laurel, one species of the wild crab, and several kinds of underbrush, among which the rosebushes are conspicuous.

Sunday, December 1, 1805. Again we had a cloudy day, and the wind so high from the east, that having ventured in a boat with a view to hunt at some distance, we were obliged to return. We resumed our occupation of dressing leather and mending our old clothes, in which we passed the day. The hunters came in with a report of their having seen two herds of elk, but they could kill nothing, and we therefore again fed upon dried fish. At sunset it began to rain violently, and continued all night, and

Monday, 2d, the next day. This disagreeable food, pounded fish, has occasioned so much sickness among the men that it is now absolutely necessary to vary it. Three hunters therefore set out, and three more were sent up the Kekemahke creek in search of fish or birds. Towards evening one of them returned: he had observed great appearances of elk, and even seen two herds of them; but it rained so hard that he could with difficulty get a shot; he had, however, at last killed one, at the distance of six miles from the camp, and a canoe was now sent to bring it. The party from Kekemahke creek were less successful: they had seen no fish, and all the birds, in consequence probably of being much hunted by the Indians, were too shy to be approached.

Tuesday, 3. The wind was from the east, and the morning fair; but, as if a whole day of fine weather was not permitted, towards night it began to rain. Even this transient glimpse of sunshine revived the spirits of the party, who were still more pleased, when the elk killed yesterday was brought into camp. This was the first elk we had killed on the west side of the Rocky mountains, and condemned as we had been to the dried fish, forms a most nourishing food. After eating the marrow of the shank-bones, the squaw chopped them fine, and by boiling, extracted a pint of grease, superior to the tallow itself of the animal. A canoe of eight Indians, who were carrying down wappateo roots to trade with

the Clatsops, stopped at our camp: we bought a few roots for small fish-hooks; and they then left us: but accustomed as we are to the sight, we could not but view with admiration the wonderful dexterity with which they guide their canoes over the most boisterous seas; for though the waves were so high, that before they had gone half a mile, the canoe was several times out of sight, they proceeded with the greatest calmness and security. Two of the hunters who set out yesterday had lost their way, and did not return till this evening: they had seen in their ramble great signs of elk, and had killed six elk, which they had butchered and left at a great distance. A party was sent in the morning,

Wednesday, Dec. 4, to carry the elk to a bay, some distance below, to which place, if the weather permitted, we would all remove our camp this evening; but the rain which had continued during the night lasted all next day, and was accompanied by so high a wind from the south-east and south, that we dared not risk our canoes on the water. It was high water at eleven o'clock, when the spring tide rose two feet higher than the common flood-tides. We passed the day around our fires, and as we are so situated that the smoke will not immediately leave the camp, we are very much incommoded, and our eyes injured by it. No news has yet been received from Captain Lewis, and we begin to have much uneasiness for his safety.

Thursday, December 5. It rained during the whole night, and this morning the rain and high wind compelled us to remain at our camp. Besides the inconvenience of being thus stopped on our route, we now found that all our stores and bedding are again wet with rain. The high water was at twelve o'clock, and rose two inches beyond that of yesterday. In the afternoon we were rejoiced at the return of captain Lewis, who came in a canoe with three of his men, the other two being left to guard six elk and five deer which they had killed: he had examined the coast, and found a river a short distance below, on which we might encamp during the winter, with a sufficiency of elk for our subsistence within reach. This information was very satisfactory, and we decided on going thither as soon as we could move from the point; but all night and the following day,

Friday, 6, it rained, and the wind blew hard from the south-west, so that the sea was still too rough for us to proceed. The high tide of to-day rose thirteen inches higher than it did yesterday, and obliged us to move our camp to a high situation. Here we remained waiting for better weather, till about dark the wind shifted to the north, and the sky was clear. We had now some prospect of being able to leave our situation, and indeed although some rain fell in the course of the night, the next morning,

Saturday, 7, was fair; we therefore loaded our canoes, and proceeded. But the tide was against us, and the waves very high, so that we were obliged to proceed slowly and cautiously. We at length turned a point, and found ourselves in a deep bay; here we landed for breakfast, and were joined by the party sent out three days ago to look for the six elk. In seeking for the elk they had missed their way for a day and a half, and when they reached the place, found the elk so much spoiled, that they brought the skins only of four of them. After breakfast we coasted round the bay, which is about four miles across, and receives, besides several small creeks, two rivers called by the Indians the one Killhowanake, the other Netul. We called it Meriwether's bay, from the Christian name of captain Lewis, who was no doubt the first white man who surveyed it. As we went along the wind was high from the north-east, and in the middle of the day it rained for two hours, and then cleared off. On reaching the south side of the bay, we ascended the Netul for three miles to the first point of highland on its western bank, and formed our camp in a thick grove of lofty pines, about two hundred yards from the water, and thirty feet above the level of the high tides.

Sunday, 8. This seemed the most eligible spot for our winter establishment. In order therefore to find a place for making salt, and to examine the country further, captain Clarke set out with five men, and pursuing a course south, 60° west, over a dividing ridge, through thick pine timber, much of which had fallen, passed the heads of two small brooks. In the neighbourhood of these the land was swampy and overflowed, and they waded knee-deep till they came to an open ridgy prairie, covered with the plant known on our frontier by the name of *sacacommis*. Here is a creek about sixty yards wide, and running towards point Adams; they passed it on a small raft. At this place they discovered a large herd of elk, and after pursuing them for three miles over bad swamps and small ponds, killed one of them. The agility with which the elk crossed the swamps and bogs, seems almost incredible; as we followed their track, the ground for a whole acre would shake at our tread, and sometimes we sunk to our hips without finding any bottom. Over the surface of these bogs is a species of moss, among which are great numbers of cranberries, and occasionally there rise from the swamp steep and small knobs of earth, thickly covered with pine and laurel. On one of these we halted at night, but it was scarcely large enough to suffer us to lie clear of the water, and had very little dry wood. We succeeded however in collecting enough to make a fire, and having stretched the elk skin to keep off the rain, which still continued, slept till morning.

Monday, 9, when we rose perfectly wet with rain during the night. Three men were then sent in pursuit of the elk, while with the other three, captain Clarke proceeded westward towards the sea. He passed over three swamps, and then arrived at a creek, which was too deep to ford, and there was no wood to make a raft. He therefore proceeded down it for a short distance, till he found that he was between the forks of a creek. One branch of which he had passed yesterday, turns round towards the south-west to meet another of equal size from the south, and together they form a small river, about seventy yards wide. He returned to the place where he had left the raft, and having crossed, proceeded down about a mile, when he met three Indians. They were loaded with fresh salmon, which they had taken with a gig, and were now returning to their village on the sea-coast, where they invited him to accompany them. He agreed, and they brought out a canoe hid along the banks of the creek. In this they passed over the branch which he had just crossed on a raft, and then carried the canoe a quarter of a mile to the other fork, which they crossed and continued down to the mouth of the river. At this place it makes a great bend, where the river is seventy yards wide; just above, or to the south of which is the village. We crossed over, and found that it consisted of three houses, inhabited by twelve families of Clatsops. They were on the south exposure of a hill, and sunk about four feet deep into the ground; the walls, roof, and gable-ends being formed of split pine boards; the descent through a small door down a ladder. There are two fires in the middle of the room, and the beds disposed round the walls two or three feet from the floor, so as to leave room under them for their bags, baskets, and household articles. The floor itself is covered with mats. Captain Clarke was received with much attention. As soon as he entered, clean mats were spread, and fish, berries, and roots set before him on small neat platters of rushes. After he had eaten, the men of the other houses came and smoked with him. They all appeared much healthier in their persons and diet than Indians generally are, and frequently wash their hands and faces, a ceremony by no means frequent elsewhere. While he was conversing with them, a flock of brant lighted on the water, and he, with a small rifle, shot one of them at a great distance. They immediately jumped in, and brought it on shore, very much astonished at the shot, which contributed to make them increase their attention. Towards evening it began to rain and blow very violently from the south-west; and captain Clarke, therefore, determined to remain during the night. When they thought his appetite had returned, an old woman presented him in a bowl, made of light coloured horn, a kind of sirup, pleasant to the taste, and made from a species of berry com-

men in this country, about the size of a cherry, and called by the Indians *shel-wet*: of these berries a bread is also prepared, which being boiled with roots forms a soup, which was served in neat wooden trenchers: this, with some cockles, was his repast. The men of the village now collected, and began to gamble. The most common game, was one in which one of the company was banker, and played against all the rest. He had a piece of bone, about the size of a large bean, and having agreed with any individual as to the value of the stake, would pass the bone from one hand to the other, with great dexterity, singing at the same time, to divert the attention of his adversary; and then holding it in his hands, his antagonist was challenged to guess in which of them the bone was, and lost or won as he pointed to the right or wrong hand. To this game of hazard they abandoned themselves with great ardor; sometimes every thing they possess is sacrificed to it, and this evening several of the Indians lost all the beads which they had with them. This lasted for three hours, when captain Clarke appearing disposed to sleep, the man who had been most attentive, and whose name was Cuskalah, spread two new mats near the fire, and ordering his wife to retire to her own bed, the rest of the company dispersed at the same time. Captain Clarke then lay down, but the violence with which the fleas attacked him, did not leave his rest unbroken, and he rose,

Tuesday, 10, early. The morning was cloudy, with some rain: he walked out on the sea-shore, and observed the Indians walking up and down the creek and examining the shore: he was at a loss to understand their object, till one of them came to him and explained that they were in search of fish which had been thrown on shore and left by the tide, adding in English, "sturgeon is very good." There is, indeed, every reason to suppose, that these Clatsops depend for their subsistence during the winter, chiefly on the fish thus casually thrown on the coast. After amusing himself for some time on the beach, he returned towards the village, and shot on his way two brant. As he came near the village, one of the Indians asked him to shoot a duck about thirty steps distant: he did so, and having accidentally shot off its head, the bird was brought to the village by the Indians, all of whom came round in astonishment: they examined the duck, the musket, and the very small bullet, which were a hundred to the pound, and then exclaimed, "Clouch musquet, wake, ~~commidax~~ musquet: a good musquet, do not understand this kind of musquet." They now placed before him their best roots, fish, and sirup, after which he attempted to purchase a sea-otter skin with some red beads which he happened to have about him; but they declined trading, as they valued none except blue or white beads: he therefore bought nothing but a little berry bread and a few

roots in exchange for fish-hooks, and then set out to return by the same route on which he came. He was accompanied by Cuskalah and his brother as far as the third creek, and then proceeded to the camp through a heavy rain. The whole party had been occupied during his absence in cutting down trees to make huts, and in hunting.

Wednesday, 11. The rain continued last night and the whole of this day. We were, however, all employed in putting up our winter cabins, which we are anxious to finish, as several of the men are beginning to suffer from the excessive dampness: four of them have very violent colds, one has a dysentery, a third has tumours on his legs, and two have been injured by dislocation and straining of their limbs.

Thursday, 12. We continued to work in the rain at our houses. In the evening there arrived two canoes of Clatsops, among whom was a principal chief, called Comowool. We gave him a medal, and treated his companions with great attention; after which we began to bargain for a small sea-otter skin, some wappatoo roots, and another species of root called shanataque. We readily perceived that they were close dealers, stickled much for trifles, and never closed the bargain until they thought they had the advantage. The wappatoo is dear, as they themselves are obliged to give a high price for it to the Indians above. Blue beads are the articles most in request, the white occupy the next place in their estimation; but they do not value much those of any other colour. We succeeded at last in purchasing their whole cargo for a few fish-hooks and a small sack of Indian tobacco, which we had received from the Shoshonees. The next morning,

Friday, 13th, we treated them to a breakfast on elk meat, of which they seemed very fond, and having purchased from them two skins of the lucervia, and two robes made of the skin of an animal about the size of a cat, they left us. Two hunters returned with the pleasing intelligence of their having killed eighteen elk about six miles off. Our huts begin to rise, for though it rains all day we continue our labours, and are rejoiced to find that the beautiful balsam pine splits into excellent boards, more than two feet in width. In the evening three Indians came in a canoe with provisions and skins for sale, and spent the night with us.

Saturday, 14. Again it rained all day, but by working constantly we finished the walls of our huts, and nearly completed a house for our provisions. The constant rains have completely spoiled our last supply of elk; but notwithstanding that scarcely a man has been dry for a great number of days, the sick

are recovering. Four men were despatched to guard the elk which were killed yesterday, till a larger party joined them. Accordingly,

Sunday, 15, captain Clarke, with sixteen men set out in three canoes, and having rowed for three miles up the river, turned up a large creek from the right, and after going three miles further, landed about the height of the tide water. The men were then despatched in small parties to bring in the elk, each man returning with a quarter of the animal. In bringing the third and last load, nearly half the men missed their way, and did not return till after night; five of them indeed were not able to find their way at all. It had been cloudy all day, and in the night began to rain, and as we had no cover were obliged to sit up the greater part of the night, for as soon as we lay down the rain would come under us, and compel us to rise. It was indeed a most uncomfortable situation, but the five men who joined us in the morning,

Monday, 16, had been more unlucky, for in addition to the rain which had poured down upon them all night, they had no fire, and drenched and cold as they were when they reached us, exhibited a most distressing sight. They had left their loads where they slept, and some men were sent after them, while others were despatched after two more elk in another bend of the creek, who after taking these last on board, proceeded to our camp. It rained and hailed during the day, and a high wind from the south-east not only threw down trees as we passed along, but made the river so rough that we proceeded with great risk. We had now the meat-house covered, and all our game carefully hung up in small pieces.

Tuesday, 17. It rained all night, and this morning there was a high wind, and hail as well as rain fell; and on the top of a mountain, about ten miles to the south-east of us, we observed some snow. The greater part of our stores is wet, and our leathern tent is so rotten that the slightest touch makes a rent in it, and it will now scarcely shelter a spot large enough for our beds. We were all busy in finishing the inside of the huts. The after part of the day was cool and fair. But this respite was of very short duration, for all night it continued raining and snowing alternately, and in the morning,

Wednesday, 18, we had snow and hail till twelve o'clock, after which it changed to rain. The air now became cool and disagreeable, the wind high and unsettled, so that being thinly dressed in leather, we were able to do very little on the houses.

Thursday, 19. The rain continued all night with short intervals, but the morning was fair and the wind from the south-west. Situated as we are, our only occupation is to work as diligently as we can on our houses, and to watch

the changes of the weather, on which so much of our comfort depends. We, availed ourselves of this glimpse of sun-shine, to send across Meriwether's bay for the boards of an old Indian house; but before the party returned with them, the weather clouded, and we had hail and rain during the rest of the day. Our only visitors were two Indians, who spent a short time with us.

Friday, 20. A succession of rain and hail during the night. At ten o'clock it cleared off for a short time, but the rain soon recommenced; we now covered in four of our huts; three Indians came in a canoe with mats, roots, and the berries of the *sacacommis*. These people proceed with a dexterity and finesse in their bargains, which, if they have not learned from their foreign visitors, may show how nearly allied is the cunning of savages to the little arts of traffic. They begin by asking double or treble the value of what they have to sell, and lower their demand in proportion to the greater or less degree of ardour or knowledge of the purchaser, who with all his management is not able to procure the article for less than its real value, which the Indians perfectly understand. Our chief medium of trade consists of blue and white beads, files with which they sharpen their tools, fish-hooks, and tobacco: but of all these articles blue beads and tobacco are the most esteemed.

Saturday, 21. As usual it rained all night and continued without intermission during the day. One of our Indian visitors was detected in stealing a horn spoon, and turned out of the camp. We find that the plant called *sacacommis* forms an agreeable mixture with tobacco, and we therefore despatched two men to the open lands near the ocean, in order to collect some of it, while the rest continued their work.

Sunday, 22. There was no interval in the rain last night and to-day; so that we cannot go on rapidly with our buildings. Some of the men are indeed quite sick, others have received bruises, and several complain of biles. We discover too, that part of our elk meat is spoiling in consequence of the warmth of the weather, though we have kept up a constant smoke under it.

Monday, 23. It continued raining the whole day, with no variation except occasional thunder and hail. Two canoes of Clatsops came to us with various articles for sale; we bought three mats and bags neatly made of flags and rushes, and also the skin of a panther seven feet long, including the tail. For all these we gave six small fishhooks, a worn-out file, and some pounded fish which had become so soft and mouldy by exposure, that we could not use it: it is, however, highly prized by the Indians of this neighbourhood. Although a very portable and convenient food, the mode of curing seems known, or at least practised only by the Indians near the Great Falls, and coming from such a

distance, has an additional value in the eyes of these people, who are anxious to possess some food less precarious than their ordinary subsistence. Among these Clatsops was a second chief to whom we gave a medal, and sent some pounded fish to Cuscalah, who could not come to see us, on account of sickness. The next day,

Tuesday, 24, however, he came in a canoe with his young brother and two squaws. Having treated captain Clarke so kindly at his village we were pleased to see him, and he gave us two mats and a parcel of roots. These we accepted, as it would have been offensive to decline the offer, but afterwards two files were demanded in return for the presents, and not being able to spare those articles, we restored the mats and roots. Cuscalah was a little displeased: in the evening, however, he offered each of us one of the squaws, and even this being declined, Cuscalah as well as the whole party of Indians were highly offended: the females particularly seemed to be much incensed at our indifference about their favours. The whole stock of meat being now completely spoiled, our pounded fish became again our chief dependence. It had rained constantly all day, but we still continued working and at last moved into our huts.

Wednesday, 25. We were awaked at daylight by a discharge of firearms, which was followed by a song from the men, as a compliment to us on the return of Christmas, which we have always been accustomed to observe as a day of rejoicing. After breakfast we divided our remaining stock of tobacco, which amounted to twelve carrots, into two parts; one of which we distributed among such of the party as made use of it, making a present of a handkerchief to the others. The remainder of the day was passed in good spirits, though there was nothing in our situation to excite much gaiety. The rain confined us to the house, and our only luxuries in honour of the season, were some poor elk, so much spoiled that we ate it through mere necessity, a few roots, and some spoiled pounded fish. The next day,

Thursday, 26, brought a continuation of rain, accompanied with thunder, and a high wind from the south-east. We were therefore still obliged to remain in our huts, and endeavoured to dry our wet articles before the fire. The fleas which annoyed us near the portage of the Great Falls, have taken such possession of our clothes, that we are obliged to have a regular search every day through our blankets as a necessary preliminary to sleeping at night. These animals indeed are so numerous, that they are almost a calamity to the Indians of this country. When they have once obtained the mastery of any house it is impossible to expel them, and the Indians have frequently different houses, to which they resort occasionally when the fleas have rendered their permanent

residence intolerable; yet in spite of these precautions, every Indian is constantly attended by multitudes of them, and no one comes into our houses without leaving behind him swarms of these tormenting insects.

Friday, 27. The rain did not cease last night, nor the greater part of the day. In the evening we were visited by Comowool, the chief, and four men of the Clatsop nation, who brought a very timely supply of roots and berries. Among these was one called culhomo, resembling liquorice in size and taste, and which they roast like a potatoe; there was also the shanataque, a root of which they are very fond. It is of a black colour, sweet to the taste, and is prepared for eating in a kiln, as the Indians up the Columbia dry the pasheco. These as well as the shellwell berries, they value highly, but were perfectly satisfied with the return we made them, consisting of a small piece of sheepskin, to wear round the chief's head, a pair of earbobs for his son, a small piece of brass, and a little riband. In addition to our old enemies the fleas, we observed two musquitoes, or insects so completely resembling them, that we can perceive no difference in their shape and appearance.

Saturday, 28. Again it rained during the greater part of last night, and continued all day. Five men were sent out to hunt, and five others despatched to the seaside, each with a large kettle, in order to begin the manufacture of salt. The route to the seacoast is about seven miles in length, in a direction nearly west. Five miles of the distance is through thick wood varied with hills, ravines and swamps, though the land in general possesses a rich black mould. The remaining two miles is formed of open waving prairies of sand, with ridges running parallel to the river, and covered with green grass. The rest of the men were employed in making pickets and gates for our new fort. Although we had no sun, the weather was very warm.

Sunday, 29. It rained the whole night, but ceased this morning, and but little rain fell in the course of the day; still the weather was cloudy and the wind high from the south-east. The Clatsop chief and his party left us, after begging for a great number of articles, which, as we could not spare them, we refused except a razor. We were employed all day in picketting the fort: in the evening a young Wahkiacum chief, with four men and two women, arrived with some dressed elk skin and wappatoo for sale. We purchased about a bushel and a half of those roots for some red beads, and small pieces of brass wire and old check. The chief too made us a present of half a bushel more, for which we gave him a medal, and a piece of riband, to tie round his hat. These roots are extremely grateful, since our meat has become spoiled, and we were desirous of purchasing the remainder; but the chief would not dispose of any

more, as he was on his way to trade with the Clatsops. They remained with us however till the next day,

Monday, 30, when they were joined by four more of their countrymen from the Wahkiacum village. These last began by offering us some roots; but as we had now learned that they always expect three or four times as much in return as the real value of the articles, and are even dissatisfied with that, we declined such dangerous presents. Towards evening the hunters brought in four elk, and after a long course of abstinence and miserable diet, we had a most sumptuous supper of elk's tongues and marrow. Besides this agreeable repast, the state of the weather had been quite exhilarating. It had rained during the night, but in the morning, though the high wind continued, we enjoyed the fairest and most pleasant weather since our arrival; the sun having shone at intervals, and there being only three showers in the course of the day. By sunset we had completed the fortification, and now announced to the Indians that every day at that hour the gates would be closed, and they must leave the fort and not enter it till sun-rise. The Wahkiacums, who had remained with us, and who are very forward in their deportment, complied very reluctantly with this order; but being excluded from our houses, formed a camp near us.

Tuesday, 31. As if it were impossible to have twenty-four hours of pleasant weather, the sky last evening clouded, and the rain began and continued through the day. In the morning there came down two canoes, one from the Wahkiacum village, the other contained three men and a squaw of the Skilloot nation. They brought wappatoo, and shanataque roots, dried fish, mats made of flags and rushes, dressed elk skins, and tobacco; for which, particularly the skins, they asked a very extravagant price. We purchased some wappatoo, and a little tobacco, very much like that we had seen among the Shoshonees, put up in small neat bags made of rushes. These we obtained in exchange for a few articles, among which fish-hooks are the most esteemed. One of the Skilloots brought a gun which wanted some repair, and having put it in order, we received from him a present of about a peck of wappatoo; we then gave him a piece of sheep skin and blue cloth, to cover the lock, and he very thankfully offered a further present of roots. There is, in fact, an obvious superiority in these Skilloots over the Wahkiacums, who are intrusive, thievish, and impertinent. Our new regulations, however, and the appearance of the sentinel, have improved the behaviour of all our Indian visitors. They left the fort before sun-set, even without being ordered.

Besides the fleas, we observe a number of insects in motion to-day, and flies

are yet to be seen ; snails too, without covers, are common. On the rivers, and along the shores of Meriwether's Bay, are many kinds of large water fowls, but at this period they are excessively wild. The early part of the night was fair.

Wednesday, January 1, 1806. We were awaked at an early hour by a discharge of a volley of small arms, to salute the new year. This is the only mode of doing honour to the day which our situation permits ; for though we have reason to be gayer than we were at Christmas, our only dainties are the bouled elk and wappatoo, enlivened by draughts of pure water. We were visited by a few Clatsops, who came by water, bringing roots and berries for sale. Among this nation we have observed a man about twenty-five years old, of a much lighter complexion than the Indians generally : his face was even freckled, and his hair long, and of a colour inclining to red. He was in habits and manners perfectly Indian ; but though he did not speak a word of English, he seemed to understand more than the others of his party ; and, as we could obtain no account of his origin, we concluded that one of his parents, at least, must have been completely white.

These Indians staid with us during the night, and left the fort next morning,

Thursday, 2, having disposed of their cargo for fishing-hooks and other trifling articles. The hunters brought in two elk, and we obtained from the traps another. This animal, as well as the beaver and the rackoon, are in plenty near the sea-coast, and along the small creeks and rivers as high as the Grand Rapids, and in this country possess an extremely good fur.

The birds which most strike our attention are the large as well as the small or whistling swan, the sandhill crane, the large and small geese, cormorants, brown and white brant, duckauinmallard, the canvass and several other species of ducks. There is also a small crow, the blue crested corvus, and the smaller corvus with a white breast, the little brown wren, a large brown sparrow, the bald eagle, and the beautiful buzzard of the Columbia. All these wild fowl continue with us, though they are not in such numbers as on our first arrival in this neighbourhood.

Friday, 3. At eleven o'clock we were visited by our neighbour the Fia, or chief Comowool, who is also called Coone, and six Clatsops. Besides roots and berries, they brought for sale three dogs and some fresh blubber. Having been so long accustomed to live on the flesh of dogs, the greater part of us have acquired a fondness for it, and our original aversion for it is overcome, by reflecting that while we subsisted on that food we were fatter, stronger, and in

general, enjoyed better health than at any period since leaving the buffalo country eastward of the mountains. The blubber, which is esteemed by the Indians an excellent food, has been obtained, they tell us, from their neighbours the Killamucks, a nation who live on the sea-coast to the south-east, and near one of whose villages a whale had recently been thrown and foundered. Three of the hunters who had been despatched on the 28th, returned about dark; they had been fifteen miles up the river to the east of us, which falls into Meriwether's Bay, and had hunted a considerable distance to the east; but they had not been able to kill more than a single deer, and a few fowls, scarcely sufficient for their subsistence; an incident which teaches us the necessity of keeping out several parties of hunters, in order to procure a supply against any exigency.

Saturday 4. Comowool left us this morning with his party, highly pleased with a present of an old pair of satin breeches. The hunters were all sent in different directions, and we are now becoming more anxious for their success since our store of wappatoo is all exhausted.

Sunday, 5. Two of the five men who had been despatched to make salt returned. They had carefully examined the coast, but it was not till the fifth day after their departure that they discovered a convenient situation for their manufacture. At length they formed an establishment about fifteen miles south-west of the fort, near some scattered houses of the Clatsop and Killamuck nation, where they erected a comfortable camp, and had killed a stock of provisions. The Indians had treated them very kindly, and made them a present of the blubber of the whale, some of which the men brought home. It was white and not unlike the fat of pork, though of a coarser and more spongy texture, and on being cooked was found to be tender and palatable, and in flavour resembling the beaver. The men also brought with them a gallon of salt, which was white, fine, and very good, but not so strong as the rock-salt common to the western parts of the United States. It proves to be a most agreeable addition to our food, and as the salt makers can manufacture three or four quarters a day, we have a prospect of a very plentiful supply. The appearance of the whale seemed to be a matter of importance to all the neighbouring Indians, and as we might be able to procure some of it for ourselves, or at least purchase blubber from the Indians, a small parcel of merchandise was prepared, and a party of men held in readiness to set out in the morning. As soon as this resolution was known, Chaboneau and his wife requested that they might be permitted to accompany us. The poor woman stated very earnestly that she had travelled a great way with us to see the great water, yet she had never been down to the coast, and now

that this monstrous fish was also to be seen, it seemed hard that she should not be permitted to see neither the ocean nor the whale. So reasonable a request could not be denied; they were therefore suffered to accompany captain Clark, who,

Monday 6, after an early breakfast, set out with twelve men in two canoes. He proceeded down the Netul into Meriwether bay, intending to go to the Clatsop town, and there procure a guide through the creeks, which there was reason to believe communicated not only with the bay, but with a small river running towards the sea, near where our saltmakers were encamped. Before however he could reach the Clatsop village, the high wind from the north-west compelled him to put into a small creek. He therefore resolved to attempt the passage without a guide, and proceeded up the creek three miles, to some high open land where he found a road. He therefore left the canoes, and followed the path over three deep marshes to a pond about a mile long, and two hundred yards wide. He kept on the left of this pond, and at length came to the creek which he had crossed on a raft, when he had visited Cuscalah's village on the ninth of December. He proceeded down it, till he found a small canoe, fit to hold three persons, in which the whole party crossed the creek. Here they saw a herd of elk, and the men were divided in small parties, and hunted them till after dark, when they met again at the forks of the river. Three of the elk were wounded, but night prevented their taking more than one, which was brought to the camp, and cooked with some sticks of pine which had drifted down the creeks. The weather was beautiful, the sky clear, the moon shone brightly, a circumstance the more agreeable, as this is the first fair evening we have enjoyed for two months.

CHAP. XXII.

A PARTY HEADED BY CAPTAIN CLARKE, GO IN QUEST OF A WHALE DRIVEN ON THE SHORE OF THE PACIFIC TO OBTAIN SOME OF THE OIL—THEY PASS CLATSOP RIVER, WHICH IS DESCRIBED—THE PERILOUS NATURE OF THIS JAUNT, AND THE GRANDEUR OF THE SCENERY DESCRIBED—INDIAN MODE OF EXTRACTING WHALE OIL—THE LIFE OF ONE OF CAPTAIN CLARKE'S PARTY PRESERVED BY THE KINDNESS OF AN INDIAN WOMAN—A SHORT ACCOUNT OF THE CHINNOOKS, OF THE CLATSOPS, KILLAMUCKS, THE LUCKTONS, AND AN ENUMERATION OF SEVERAL OTHER TRIBES—THE MANNER OF SEPULCHRE AMONG THE CHINNOOKS, CLATSOPS, &c.—DESCRIPTION OF THEIR WEAPONS OF WAR AND HUNTING—THEIR MODE OF BUILDING HOUSES—THEIR MANUFACTURES, AND COOKERY—THEIR MODE OF MAKING CANOES—THEIR GREAT DEXTERITY IN MANAGING THAT VEHICLE.

TUESDAY, 7. THERE was a frost this morning. We rose early, and taking eight pounds of flesh, which were all the remains of the elk, proceeded up the south fork of the creek. At the distance of two miles we found a pine tree, which had been felled by one of our saltmakers, and on which we crossed the deepest part of the creek, and waded through the rest. We then went over an open ridgy prairie, three-quarters of a mile, to the sea-beach; after following which for three miles, we came to the mouth of a beautiful river, with a bold, rapid current, eighty-five yards wide, and three feet deep, in its shallowest crossings. On its north-east side are the remains of an old village of Clatsops, inhabited by only a single family, who appeared miserably poor and dirty. We gave a man two fish-hooks, to ferry the party over the river, which, from the tribe on its banks, we called Clatsop river. The creek, which we had passed on a tree, approaches this river within about an hundred yards, and by means of a portage, supplies a communication with the villages near Point Adams. After going on for two miles, we found the saltmakers encamped near four houses of Clatsops and Killamucks, who, though poor, dirty, and covered with fleas,

seemed kind and well disposed. We persuaded a young Indian, by a present of a file, and a promise of some other articles, to guide us to the spot where the whale lay. He led us for two and a half miles over the round slippery stones at the foot of a high hill projecting into the sea, and then suddenly stopping, and uttering the word peshack or bad, explained by signs that we could no longer follow the coast, but must cross the mountain. This promised to be a most laborious undertaking, for the side is nearly perpendicular, and the top lost in clouds. He, however, followed an Indian path which wound along as much as possible, but still the ascent was so steep, that at one place we drew ourselves for about an hundred feet by means of bushes and roots. At length, after two hours labour, we reached the top of the mountain, where we looked down with astonishment on the prodigious height of ten or twelve hundred feet, which we had ascended. Immediately below us, in the face of this precipice, is a stratum of white earth, used, as our guide informed us, as a paint by the neighbouring Indians. It obviously contains argile, and resembles the earth of which the French porcelaine is made, though whether it contains silex or magnesia, or in what proportions, we could not observe. We were here met by fourteen Indians, loaded with oil and blubber, the spoils of the whale, which they were carrying in very heavy burdens, over this rough mountain. On leaving them, we proceeded over a bad road till night, when we encamped on a small run: we were all much fatigued, but the weather was pleasant, and, for the first time since our arrival here, an entire day has passed without rain. In the morning,

Wednesday 8, we set out early and proceeded to the top of the mountain, the highest point of which is an open spot facing the ocean. It is situated about thirty miles south-east of cape Disappointment, and projects nearly two and a half miles into the sea. Here one of the most delightful views in nature presents itself. Immediately in front is the ocean, which breaks with fury on the coast, from the rocks of cape Disappointment as far as the eye can discern to the north-west, and against the highlands and irregular piles of rock which diversify the shore to the south-east. To this boisterous scene, the Columbia, with its tributary waters, widening into bays as it approaches the ocean, and studded on both sides with the Chinook and Clatsop villages, forms a charming contrast; while immediately beneath our feet, are stretched the rich prairies, enlivened by three beautiful streams, which conduct the eye to small lakes at the foot of the hills. We stopped to enjoy the romantic view from this place, which we distinguished by the name of Clarke's Point of View, and then followed our guide down the mountain. The descent was steep and dangerous: in many places the hill sides, which are formed principally of yellow clay, have been washed by the late rains.

and is now slipping into the sea, in large masses of fifty and an hundred acres. In other parts, the path crosses the rugged perpendicular rocks which overhang the sea, into which a false step would have precipitated us. The mountains are covered with a very thick growth of timber, chiefly pine and fir; some of which near Clarke's Point of View, perfectly sound and solid, rise to the height of two hundred and ten feet, and are from eight to twelve in diameter. Intermixed is the white cedar, or arbor vitæ, and a small quantity of black alder, two or three feet thick, and sixty or seventy in height. At length we reached a single house, the remains of an old Killamuck village, situated among some rocks, in a bay immediately on the coast. We then continued for two miles along the sand beach; and after crossing a creek, eighty yards in width, near which are five cabins, reached the place where the waves had thrown the whale on shore. The animal had been placed between two Killamuck villages, and such had been their industry, that there now remained nothing more than the skeleton, which we found to be one hundred and five feet in length. Captain Clarke then returned to the village of five huts, on the creek, to which he gave the name of Ecola, or Whale creek. The natives were all busied in boiling the blubber, in a large square trough of wood, by means of heated stones, and preserving the oil, thus extracted, in bladders and the entrails of the whale. The refuse of the blubber, which still contained a portion of oil, are hung up in large fitches, and when wanted for use, are warmed on a wooden spit before the fire, and eaten either alone, or dipped in oil, or with roots of the rush and shanataque. These Killamucks, though they had great quantities, parted with it reluctantly, and at such high prices, that our whole stock of merchandise was exhausted in the purchase of about three hundred pounds of blubber, and a few gallons of oil. With these we set out to return; and having crossed Ecola creek, encamped on its bank, where there was abundance of fine-timber. We were soon joined by the men of the village, with whom we smoked, and who gave us all the information they possessed, relative to their country. These Killamucks are part of a much larger nation of the same name, and they now reside chiefly in four villages, each at the entrance of a creek, all of which fall into a bay on the south-west coast; that at which we now are, being the most northern, and at the distance of about forty-five miles south-east of Point Adams. The rest of the nation are scattered along the coast, and on the banks of a river, which, as we found it in their delineations, we called Killamuck's river, emptying itself in the same direction. During the salmon season they catch great quantities of that fish, in the small creeks, and when they fail, their chief resource was the sturgeon and other fish stranded along the coast. The elk were very numerous in

the mountains, but they could not procure many of them with their arrows; and their principal communication with strangers, was by means of the Killamuck river, up which they passed to the Shocatilcum (or Columbia) to trade for wapato roots. In their dress, appearance, and indeed every circumstance of life, they differ very little from the Chinooks, Clatsops, and other nations in the neighbourhood. The chief variation we have observed is in the manner of burying the dead; the bodies being secured in an oblong box of plank, which is placed in an open canoe, lying on the ground, with a paddle, and other small articles of the deceased by his side.

Whilst smoking with the Indians, captain Clarke was surprised about ten o'clock by a loud shrill outcry from the opposite village; on hearing which, all the Indians immediately started up to cross the creek, and the guide informed him that some one had been killed. On examination, one of the men was discovered to be absent, and a guard despatched, who met him crossing the creek in great haste. An Indian belonging to another band, and who happened to be with the Killamucks that evening, had treated him with much kindness, and walked arm in arm with him to a tent where our man found a Chinook squaw, who was an old acquaintance. From the conversation and manner of the stranger, this woman discovered that his object was to murder the white man, for the sake of the few articles on his person, and when he rose, and pressed our man to go to another tent where they would find something better to eat, she held M'Neal by the blanket; not knowing her object, he freed himself from her, and was going on with his pretended friend, when she ran out and gave the shriek which brought the men of the village over, and the stranger ran off before M'Neal knew what had occasioned the alarm.

Thursday, 9. The morning was fine, the wind from the north-east; and having divided our stock of the blubber, we began at sunrise to retread our steps, in order to reach fort Clatsop, at the distance of thirty-five miles. We met several parties of Indians on their way to trade for blubber and oil with the Killamucks; (our route lay across the same mountains which we had already passed) we also overtook a party returning from the village, and could not but regard with astonishment the heavy loads which the women carry over these fatiguing and dangerous paths. As one of the women was descending a steep part of the mountain, her load slipped from her back, and she stood holding it by a strap with one hand, and with the other supporting herself by a bush: captain Clarke being near her, undertook to replace the load, and found it almost as much as he could lift, and above one hundred pounds in weight.

Loaded as they were, they kept pace with us, till we reached the saltmakers' tents, where we passed the night, while they continued their route.

Friday, 10. We proceeded across Clatsop river, to the place where we had left our canoes; and as the tide was coming in, immediately embarked for the fort, at which place we arrived about ten o'clock at night. During their absence, the men had been occupied in hunting, and dressing skins, but in this they were not very successful, as the deer have become scarce, and are indeed, seen chiefly near the prairies and open grounds, along the coast. This morning, however, there came to the fort twelve Indians, in a large canoe. They are of the Cathlamah nation, our nearest neighbours above, on the south side of the river. The tia, or chief, whose name was Shahawacap, having been absent on a hunting excursion, as we passed his village, had never yet seen us, and we therefore shewed him the honours of our country, as well as our reduced finances would permit. We invested him with a small medal, and received a present of Indian tobacco and a basket of wappatoo in return, for which we gave him a small piece of our tobacco, and thread for a fishing net. They had brought dried salmon, wappatoo, dogs, and mats made of rushes and flags: but we bought only some dogs and wappatoo. These Cathlamahs speak the same language as the Chinooks and Clatsops, whom they also resemble in dress and manners.

Saturday, 11. A party was sent out to bring in some elk killed yesterday, and several were despatched after our Indian canoe, which drifted away last night; but, though the whole neighbourhood was diligently searched, we were unable to find it. This is a serious loss, as she is much superior to our own canoes, and so light that four men can carry her readily without fatigue, though she will carry from ten to twelve hundred pounds, besides a crew of four. In the evening the Cathlamahs left us, on their way to barter their wappatoo with the Clatsops, for some blubber and oil, which these last have procured from the Killamucks, in exchange for beads and other articles.

Sunday, 12. Our meat is now becoming scarce; we, therefore, determined to jerk it, and issue it in small quantities, instead of dividing it among the four messes, and leaving to each the care of its own provisions; a plan by which much is lost, in consequence of the improvidence of the men. Two hunters had been despatched in the morning, and one of them, Drowyer, had before evening killed seven elk. We should scarcely be able to subsist, were it not for the exertions of this most excellent hunter. The game is scarce, and nothing is now to be seen, except elk, which to almost all the men, are very difficult to

be procured : but Drewyer, who is the offspring of a Canadian Frenchman, and an Indian woman, has passed his life in the woods, and unites, in a wonderful degree, the dextrous aim of the frontier huntsman, with the intuitive sagacity of the Indian, in pursuing the faintest tracks through the forest. All our men, however, have indeed, become so expert with the rifle, that we are never under apprehensions as to food, since, whenever there is game of any kind, we are almost certain of procuring it.

Monday, 13. Captain Lewis took all the men who could be spared, and brought in the seven elk, which they had found untouched by the wolves, of which there are a few in the neighbourhood. The last of the candles which we brought with us being exhausted, we now began to make others of elk tallow. From all that we have seen and learnt of the Chinooks, we have been induced to estimate the nation at about twenty-eight houses, and four hundred souls. They reside chiefly along the banks of a river, to which we gave the same name; and which, running parallel to the seacoast, waters a low country with many stagnant ponds, and then empties itself into Haley's bay. The wild fowl of these ponds, and the elk and deer of the neighbourhood, furnish them with occasional luxuries; but their chief subsistence is derived from the salmon and other fish, which are caught in the small streams, by means of nets and gigs, or thrown on shore by the violence of the tide. To these are added some roots, such as the wild liquorice, which is the most common, the shanataque, and the wappatoo, brought down the river by the traders.

The men are low in stature, rather ugly, and ill made; their legs being small and crooked, their feet large, and their heads like those of the women, flattened in a most disgusting manner. These deformities are in part concealed by robes made of sea-otter, deer, elk, beaver, or fox skins. They also employ in their dress, robes of the skin of a cat peculiar to this country, and of another animal of the same size, which is light and durable, and sold at a high price by the Indians, who bring it from above. In addition to these are worn blankets, wrappers of red, blue, or spotted cloth, and some sailors' old clothes, which were very highly prized. The greater part of the men have guns, powder, and ball.

The women have, in general, handsome faces, but are low and disproportioned, with small feet and large legs and thighs, occasioned, probably, by strands of beads, or various strings, drawn so tight above the ankles as to prevent the circulation of the blood. Their dress, like that of the Wahkiacums, consists of a short robe, and a tissue of cedar bark. Their hair hangs loosely down the shoulders and back; and their ears, neck, and wrists are ornamented with blue

heads. Another decoration which is very highly prized, consists of ~~figures~~, made by puncturing the arms or legs; and on the arm of one of the squaws, we observed the name of J. Bowman, executed in the same way. In language, habits, and in almost every other particular, they resemble the Clatsops, Cathlamahs, and indeed all the people near the mouth of the Columbia. They, however, seem to be inferior to their neighbours in honesty as well as spirit. No ill treatment or indignity, on our part, seems to excite any feeling, except fear; nor, although better provided than their neighbours with arms, have they enterprise enough to use them advantageously against the animals of the forest, nor offensively against their neighbours; who owe their safety more to the timidity than the forbearance of the Chinooks. We had heard instances of pilfering whilst we were amongst them, and therefore had a general order, excluding them from our encampment: so that whenever an Indian wished to visit us, he began by calling out "No Chinook." It may be probable that this first impression left a prejudice against them, since when we were among the Clatsops, and other tribes at the mouth of the Columbia, the Indians had less opportunity of stealing, if they were so disposed.

Tuesday, 14, we were employed in jerking the meat of the elk, and searching for one of the canoes which had been carried off by the tide last night. Having found it, we now had three of them drawn up out of reach of the water, and the other secured by a strong cord, so as to be ready for any emergency.

After many inquiries and much observation, we were at length enabled to obtain a connected view of the nations, who reside along the coast, on both sides of the Columbia.

To the south, our personal observation has not extended beyond the Killamucks; but we obtained from those who were acquainted with the seacoast, a list of the Indian tribes, in the order in which they succeed each other, to a considerable distance. The first nation to the south are the Clatsops, who reside on the southern side of the bay, and along the seacoast, on both sides of Point Adams. They are represented as the remains of a much larger nation; but about four years ago, a disorder, to which till then they were strangers, but which seems, from their description, to have been the small-pox, destroyed four chiefs, and several hundreds of the nation. These are deposited in canoes, a few miles below us on the bay, and the survivors do not number more than fourteen houses, and about two hundred souls. Next to them along the south-east coast, is a much larger nation, the Killamucks, who number fifty houses, and a thousand souls. Their first establishment are the four ~~huts~~ at the mouth of Ecola creek, thirty-five miles from Point Adams; and two miles below are a

~~saw~~ more huts; but the principal town is situated twenty miles lower, at the entrance of a creek, called Nieloe, into the bay, which we designate by the name of Killamuck's bay. Into the same bay empties a second creek, five miles further, where is a Killamuck village, called Kilberhurst; at two miles a third creek, and a town called Kilherner; and at the same distance a town called *Chishuck*, at the mouth of Killamuck river. Towerquotton and *Chuctin*, are the names of two other towns, situated on creeks which empty into the bottom of the bay, the last of which is seventy miles from Point Adams. The Killamuck river is about one hundred yards wide, and very rapid; but having no perpendicular fall, is the great avenue for trade. There are two small villages of Killamucks settled above its mouth, and the whole trading part of the tribe ascend it, till by a short portage, they carry their canoes over to the Columbian valley, and descend the Multnomah to Wappatoo island. Here they purchase roots, which they carry down the Chockalilum or Columbia; and, after trafficking with the tribes on its banks for the various articles which they require, either return up the Columbia, or cross over through the country of the Clatsops. This trade, however, is obviously little more than a loose and irregular barter, on a very small scale; for the materials for commerce are so extremely scanty and precarious, that the stranding of a whale was an important commercial incident, which interested all the adjoining country. The Killamucks have little peculiar, either in character or manners, and resemble, in almost every particular, the Clatsops and Chinooks.

Adjoining the Killamucks, and in a direction S. S. E. are the *Lucktons*, a small tribe inhabiting the seacoast. They speak the same language as the Killamucks, but do not belong to the same nation. The same observation applies to the *Kahunkle* nation, their immediate neighbours, who are supposed to consist of about four hundred souls.

The *Lickawis*, a still more numerous nation, who have a large town of eight hundred souls.

The *Youkone* nation, who live in very large houses, and number seven hundred souls.

The *Necketo* nation, of the same number of persons.

The *Ulseah* nation, a small town of one hundred and fifty souls.

The *Youitts*, a tribe who live in a small town, containing not more than one hundred and fifty souls,

The *Ohiastackie* nation, who have a large town of nine hundred souls.

The *Killuwats* nation, of five hundred souls collected into one large town.

With this last nation ends the language of the Killamucks: and the coast,

which then turns towards the south-west, is occupied by nations whose languages vary from that of the Killamucks, and from each other. Of these, the first in order are,

The Cookoose, a large nation of one thousand five hundred souls, inhabiting the shore of the Pacific and the neighbouring mountains. We have seen several of this nation, who were taken prisoners by the Clatsops and Killamucks. Their complexion was much fairer than that of the Indians near the mouth of the Columbia, and their heads were not flattened. Next to these are,

The Shalalabs, of whom we know nothing, except their numbers, which are computed at twelve hundred souls. Then follow

The Luckasos, of about the same number, and

The Hannakalals, whom we estimate at six hundred souls.

This is the extent of the Indian information, and judging, as we can do, with considerable accuracy, from the number of sleeps, or days' journey, the distance which these tribes occupy along the coast, may be estimated at three hundred and sixty miles.

On the north of the Columbia we have already seen the Chinooks, of four hundred souls, along the shores of Haley's bay, and the low grounds on Chinook river. Their nearest neighbours to the north-east are

The Killaxthokle, a small nation on the coast, of not more than eight houses, and a hundred souls. To these succeed

The Chilts, who reside above Point Lewis, and who are estimated at seven hundred souls, and thirty-eight houses. Of this nation, we saw, transiently, a few among the Chinooks, from whom they did not appear to differ. Beyond the Chilts we have seen none of the north-west Indians, and all that we learnt, consisted of an enumeration of their names and numbers. The nations next to the Chilts, are

The Clamoitomish, of twelve houses, and two hundred and sixty souls.

The Potoashees, of ten houses, and two hundred souls.

The Pailsk, of ten houses, and two hundred souls.

The Quinults, of sixty houses, and one thousand souls.

The Chillates, of eight houses, and one hundred and fifty souls.

The Calasthorte, of ten houses, and two hundred souls.

The Quinnechant, consisting of two thousand souls.

A particular detail of the characters, manners, and habits of the tribes, must be left to some future adventurers, who may have more leisure and a better op-

portunity than we had to accomplish this object. Those who first visit the ground, can only be expected to furnish sketches rude and imperfect.

Wednesday, 15. Two hunting parties intended setting out this morning, but they were prevented by incessant rain, which confined us all to the fort.

The Chinooks, Clatsops, and most of the adjoining nations, dispose of the dead in canoes. For this purpose a scaffold is erected, by fixing perpendicularly in the ground four long pieces of split timber. These are placed two by two, just wide enough apart to admit the canoe, and sufficiently long to support its two extremities. The boards are connected by a bar of wood run through them at the height of six feet, on which is placed a small canoe, containing the body of the deceased, carefully wrapped in a robe of dressed skins, with a paddle, and some articles belonging to the deceased, by his side. Over this canoe is placed one of a larger size, reversed, with its gunwale resting on the crossbars, so as to cover the body completely. One or more large mats of rushes or flags are then rolled round the canoes, and the whole secured by cords usually made of the bark of the white cedar. On these crossbars are hung different articles of clothing, or culinary utensils. The method practised by the Killamucks differs somewhat from this; the body being deposited in an oblong box, of plank, which, with the paddle, and other articles, is placed in a canoe, resting on the ground. With the religious opinions of these people we are but little acquainted, since we understand their language too imperfectly to converse on a subject so abstract, but it is obvious, from the different deposits which they place by their dead, that they believe in a future state of existence.*

Thursday, 16. To-day we finished curing our meat, and having now a plentiful supply of elk, and salt, and our houses dry and comfortable, we wait patiently for the moment of resuming our journey.

The implements used in hunting, by the Clatsops, Chinooks, and other neighbouring nations, are the gun, bow and arrow, deadfall, pits, snares, and spears or gigs. The guns are generally old American or British muskets repaired for this trade; and although there are some good pieces among them, they are constantly out of order, as the Indians have not been sufficiently accustomed to arms to understand the management of them. The powder is kept in small japanned tin flasks, in which the traders sell it; and when the ball or shot fails, they make use of gravel or pieces of metal from their pots, without being sensible

* This fact is much too equivocal to warrant an inference so important. These deposits might have been intended for nothing more than the testimonials of surviving affection. Amongst those savages, where the language was better understood, it does not appear, that the Indians intended any thing more by such sacrifices than to testify their reverence for the dead.—AMERICAN EDITOR.

of the injury done to their guns. These arms are reserved for hunting elk, and the few deer and bears in this neighbourhood ; but as they have no rifles, they are not very successful hunters. The most common weapon is the bow and arrow, with which every man is provided, even though he carries a gun, and which is used in every kind of hunting. The bow is extremely neat, and being very thin and flat, possesses great elasticity. It is made of the heart of the white cedar, about two feet and a half in length, two inches wide at the centre, whence it tapers to the width of half an inch at the extremities; and the back is covered with the sinews of elk, fastened on by means of a glue made from the sturgeon. The string is formed of the same sinews. The arrow generally consists of two parts ; the first is about twenty inches long, and formed of light white pine, with the feather at one end, and at the other a circular hole, which receives the second part, formed of some harder wood, and about five inches long, and secured in its place by means of sinews. The barb is either stone, or else of iron or copper, in which latter place, the angle is more obtuse than any we have seen. If, as sometimes happens, the arrow is formed of a single piece, the whole is of a more durable wood, but the form just described is preferred : because, as much of the game consists of wild fowl, on the ponds, it is desirable that they should be constructed so as to float, if they fall into the water. These arrows are kept in a quiver of elk or young bear skin, opening not at the ends, as the common quivers, but at the sides ; which, for those who hunt in canoes, is much more convenient. These weapons are not, however, very powerful, for many of the elk we kill have been wounded with them ; and, although the barb with the small end of the arrows remain, yet the flesh closes, and the animal suffers no permanent injury. The deadfalls and snares are used in taking the wolf, the racoon, and the fox, of which there are, however, but few in this country. The spear or gig employed in pursuit of the sea-otter, (which they call *spock*) the common otter, and beaver, consists of two points of barbs, and is like those already described, as common among the Indians on the upper part of the Columbia. The pits are chiefly for the elk, and are therefore usually large and deep cubes of twelve, or fourteen feet in depth, and are made by the side of some fallen tree lying across the path frequented by the elk. They are covered with slender boughs and moss, and the elk either sinks into it as he approaches the tree, or, in leaping over the tree, falls into the pit on the other side.

Friday 17. Comowool and seven other Clatsops spent the day with us. He made us a present of some roots and berries, and in return we gave him an awl and some thread, which he wanted for the purpose of making a net. We were not able to purchase any more of their provisions, the prices being too high for

our exhausted stock of merchandise. One of the Indians was dressed in three very elegant skins of the sea-otter: for these we were very desirous of trafficking: but he refused every exchange except that of blue beads, of which he asked six fathom for each skin, and as we had only four fathom left, he would not accept for the remaining two, either a knife, or any quantity of beads of another sort.

In fishing, the Clatsops, Chinooks and other nations near this place employ the common straight net, the scooping or dipping net with a long handle, the gig, and the hook and line. The first is of different lengths and depths, and used in taking salmon, carr, and trout, in the deep inlets among the marshy grounds, and the mouths of deep creeks. The scooping net is used for small fish in the spring and summer season; and in both kinds the net is formed of silk grass, or the bark of white cedar. The gig is used at all seasons, and for all kinds of fish they can procure with it; so too is the hook and line, of which the line is made of the same material as the net, and the hook generally brought by the traders; though before the whites came, they made hooks out of two small pieces of bone, resembling the European hook, but with a much more acute angle, where the two pieces were joined.

Saturday, 18. We were all occupied in dressing skins, and preparing clothes for our journey homewards. The houses in this neighbourhood are all large wooden buildings, varying in length from twenty to sixty feet, and from fourteen to twenty in width. They are constructed in the following manner. Two posts of split timber or more, agreeably to the number of partitions, are sunk in the ground, above which they rise to the height of fourteen or eighteen feet. They are hollowed at the top, so as to receive the ends of a round beam or pole, stretching from one to the other, and forming the upper point of the roof for the whole extent of the building. On each side of this range is placed another, which forms the eaves of the house, and is about five feet high; but as the building is often sunk to the depth of four or five feet, the eaves come very near the surface of the earth. Smaller pieces of timber are now extended by pairs, in the form of rafters, from the lower to the upper beam, where they are attached at both ends with cords of cedar bark. On these rafters two or three ranges of small poles are placed horizontally, and secured in the same way with strings of cedar bark. The sides are now made with a range of white boards, sunk a small distance into the ground, with the upper ends projecting above the poles at the eaves, to which they are secured by a beam passing outside, parallel with the eave-poles, and tied by cords of cedar bark passing through holes made in the boards at certain distances. The gable ends and partitions are formed in the

same way, being fastened by beams on the outside, parallel to the rafters. The roof is then covered with a double range of thin boards, except an aperture of two or three feet in the centre, for the smoke to pass through. The entrance is by a small hole, cut out of the boards, and just large enough to admit the body. The very largest houses only are divided by partitions, for though three or four families reside in the same room, there is quite space enough for all of them. In the centre of each room is a space six or eight feet square, sunk to the depth of twelve inches below the rest of the floor, and enclosed by four pieces of square timber. Here they make the fire, for which purpose pine bark is generally preferred. Around this fireplace, mats are spread, and serve as seats during the day, and very frequently as beds at night; there is however a more permanent bed made, by fixing, in two or sometimes three sides of the room, posts reaching from the roof down to the ground, and at the distance of four feet from the wall. From these posts to the wall itself, one or two ranges of boards are placed so as to form shelves, on which they either sleep, or where they stow away their various articles of merchandise. The uncured fish is hung in the smoke of their fires, as is also the flesh of the elk, when they are fortunate enough to procure any, which is but rarely.

Sunday, 20. This morning we sent out two parties of hunters in different directions. Soon after we were visited by two Clatsop men and a woman, who brought several articles to trade: we purchased a small quantity of train oil for a pair of brass armbands, and succeeded in obtaining a sea-otter skin, for which we gave our only remaining four fathoms of blue beads, the same quantity of white ones, and a knife: we gave a fish-hook also in exchange for one of their hats. These are made of cedar-bark and bear-grass, interwoven together in the form of an European hat, with a small brim of about two inches, and a high crown, widening upwards. They are light, ornamented with various colours and figures, and being nearly water-proof, are much more durable than either chip or straw hats. These hats form a small article of traffic with the whites, and the manufacture is one of the best exertions of Indian industry. They are, however, very dexterous in making a variety of domestic utensils, among which are bowls, spoons, skewers, spits, and baskets. The bowl or trough is of different shapes, sometimes round, semicircular, in the form of a canoe, or cubic, and generally dug out of a single piece of wood, the larger vessels having holes in the sides by way of handle, and all executed with great neatness. In these vessels they boil their food, by throwing hot stones into the water, and extract oil from different animals in the same way. Spoons are not very abundant, nor is there any thing remarkable in their shape, except that they are large and the

bowl broad. Meat is roasted on one end of a sharp skewer, placed erect before the fire, with the other fixed in the ground. The spit for fish is split at the top into two parts, between which the fish is placed, cut open, with its sides extended by means of small splinters. The usual plate is a small mat of rushes or flags, on which every thing is served. The instrument with which they dig up roots, is a strong stick, about three feet and a half long, sharpened and a little curved at the lower end, while the upper is inserted into a handle, standing transversely, and made of part of an elk or buck's horn. But the most curious workmanship is that of the basket. It is formed of cedar-bark and bear-grass, so closely interwoven, that it is water-tight, without the aid of either gum or resin. The form is generally conic, or rather the segment of a cone, of which the smaller end is the bottom of the basket; and being made of all sizes, from that of the smallest cup to the capacity of five or six gallons, answers the double purpose of a covering for the head or to contain water. Some of them are highly ornamented with strands of bear-grass, woven into figures of various colours, which require great labour; yet they are made very expeditiously and sold for a trifle. It is for the construction of these baskets, that the bear-grass forms an article of considerable traffic. It grows only near the snowy region of the high mountains, and the blade, which is two feet long and about three-eighths of an inch wide, is smooth, strong and pliant; the young blades particularly, from their not being exposed to the sun and air, have an appearance of great neatness, and are generally preferred. Other bags and baskets, not water-proof, are made of cedar-bark, silk-grass, rushes, flags, and common coarse sedge, for the use of families. In the manufactures, as well as in the ordinary work of the house, the instrument most in use is a knife, or rather a dagger. The handle of it is small, and has a strong loop of twine for the thumb, to prevent its being wrested from the hand. On each side is a blade, double-edged and pointed; the longer from nine to ten inches, the shorter from four to five. This knife is carried about habitually in the hand, sometimes exposed, but mostly when in company with strangers, put under the robe.

Monday, 20. We were visited by three Clatsops, who came merely for the purpose of smoking and conversing with us. We have now only three days' provision, yet so accustomed have the men become to live sparingly, and fast occasionally, that such a circumstance excites no concern, as we all calculate on our dexterity as hunters.

The industry of the Indians is not confined to household utensils: the great proof of their skill is the construction of their canoes. In a country, indeed, where so much of the intercourse between different tribes is

carried on by water, the ingenuity of the people would naturally direct itself to the improvement of canoes, which would gradually become, from a mere safe conveyance, an elegant ornament. We have accordingly seen, on the Columbia, canoes of many forms, beginning with the simple boats near the mountains, to those more highly decorated, because more useful nearer the mouth of the Columbia. Below the grand cataract there are four forms of canoes: the first and smallest is about fifteen feet long, and calculated for one or two persons: it is, indeed, by no means remarkable in its structure, and is chiefly employed by the Cathlamahs and Walkiacums among the marshy islands. The second is from twenty to thirty-five feet long, about two and a half or three feet in the beam, and two feet in the hold. It is chiefly remarkable in having the bowsprit, which rises to some height above the bow, formed by tapering gradually from the sides into a sharp point. Canoes of this shape are common to all the nations below the grand rapids.

But the canoes most used by the Columbia Indians, from the Chilluckitquaws inclusive, to the ocean, are about thirty or thirty-five feet long. The bow, which looks more like the stern of our boats, is higher than the other end, and is ornamented with a sort of comb, an inch in thickness, cut out of the same log which forms the canoe, and extending nine or eleven inches from the bowsprit to the bottom of the boat. The stern is nearly rounded off, and gradually ascends to a point. This canoe is very light and convenient; for though it will contain ten or twelve persons, it may be carried with great ease by four.

The fourth and largest species of canoe we did not meet till we reached tide-water, near the grand rapids below, in which place they are found among all the nations, especially the Killamucks, and others residing on the seacoast. They are upwards of fifty feet long, and will carry from eight to ten thousand pounds weight, or from twenty to thirty persons. Like all the canoes we have mentioned, they are cut out of a single trunk of a tree, which is generally white cedar, though the fir is sometimes used. The sides are secured by cross-bars, or round sticks, two or three inches in thickness, which are inserted through holes made just below the gunwale, and made fast with cords. The upper edge of the gunwale itself is about five-eighths of an inch thick, and four or five in breadth, and folds outwards, so as to form a kind of rim, which prevents the water from beating into the boat. The bow and stern are about the same height, and each provided with a comb, reaching to the bottom of the boat. At each end, also, are pedestals, formed of the same solid piece, on which are placed strange grotesque figures of men or animals, rising sometimes to the height of five feet, and composed of small pieces of wood, firmly united, with

great ingenuity, by inlaying and mortising, without a spike of any kind. The paddle is usually from four feet and a half to five feet in length; the handle being thick for one-third of its length, when it widens, and is hollowed and thinned on each side of the centre, which forms a sort of rib. When they embark, one Indian sits in the stern, and steers with a paddle, the others kneel in pairs in the bottom of the canoe, and sitting on their heels, paddle over the gunwale next to them. In this way they ride with perfect safety the highest waves, and venture without the least concern in seas, where other boats or seamen could not live an instant. They sit quietly and paddle, with no other movement; except, when any large wave throws the boat on her side, and, to the eye of a spectator, she seems lost: the man to windward then steadies her by throwing his body towards the upper side, and sinking his paddle deep into the wave, appears to catch the water and force it under the boat, which the same stroke pushes on with great velocity. In the management of these canoes the women are equally expert with the men; for in the smaller boats, which contain four oarsmen, the helm is generally given to the female. As soon as they land, the canoe is generally hauled on shore, unless she be very heavily laden; but at night the load is universally discharged, and the canoe brought on shore.

Our admiration of their skill in these curious constructions was increased by observing the very inadequate implements with which they are made. These Indians possess very few axes, and the only tool employed in their building, from felling of the tree to the delicate workmanship of the images, is a chisel made of an old file, about an inch and a half in width. Even of this, too, they have not yet learnt the management, for the chisel is sometimes fixed in a large block of wood, and being held in the right hand, the block is pushed with the left without the aid of a mallet. But under all these disadvantages, these canoes, which one would suppose to be the work of years, are made in a few weeks. A canoe, however, is very highly prized: in traffic, it is an article of the greatest value, except a wife, which is of equal consideration; so that a lover generally gives a canoe to the father in exchange for his daughter.

CHAP. XXIII.

AN ACCOUNT OF THE CLATSOPS, KILLAMUCKS, CHINNOOKS AND CATHLAMAHs—THEIR UNIFORM CUSTOM OF FLATTENING THE FOREHEAD—THE DRESS OF THESE SAVAGES, AND THEIR ORNAMENTS, DESCRIBED—THE LICENSED PROSTITUTION OF THE WOMEN, MARRIED AND UNMARRIED, OF WHICH A LUDICROUS INSTANCE IS GIVEN—THE CHARACTER OF THEIR DISEASES—THE COMMON OPINION, THAT THE TREATMENT OF WOMEN IS THE STANDARD BY WHICH THE VIRTUES OF AN INDIAN MAY BE KNOWN, COMBATED, AND DISPROVED BY EXAMPLES—THE RESPECT ENTERTAINED BY THESE INDIANS FOR OLD AGE, COMPARED WITH THE DIFFERENT CONDUCT OF THOSE NATIONS WHO SUBSIST BY THE CHASE—THEIR MODE OF GOVERNMENT—THEIR IGNORANCE OF ARDENT SPIRITS, AND THEIR FONDNESS FOR GAMBLING—THEIR DEXTERITY IN TRAFFIC—IN WHAT ARTICLES THEIR TRAFFIC CONSISTS—THEIR EXTRAORDINARY ATTACHMENT TO BLUE BEADS, WHICH FORMS THEIR CIRCULATING MEDIUM.

TUESDAY, 21. TWO of the hunters came back with three elk, which form a timely addition to our stock of provisions. The Indian visitors left us at twelve o'clock.

The Killamucks, Clatsops, Chinnooks, and Cathlamahs, the four neighbouring nations with whom we have had most intercourse, preserve a general resemblance in person, dress, and manners. They are commonly of a diminutive stature, badly shaped, and their appearance by no means prepossessing. They have broad thick flat feet, thick ankles, and crooked legs: the last of which deformities is to be ascribed, in part, to the universal practice of squatting, or sitting on the calves of their legs and heels, and also to the tight bandages of beads and strings worn round the ankles, by the women, which prevent the circulation of the blood, and render the legs, of the females, particularly, ill shaped and swollen. The complexion is the usual copper coloured brown of the

North American tribes, though the complexion is rather lighter than that of the Indians of the Missouri, and the frontier of the United States: the mouth is wide and the lips thick; the nose of a moderate size, fleshy, wide at the extremities, with large nostrils, and generally low between the eyes, though there are rare instances of high aquiline noses; the eyes are generally black, though we occasionally see them of a dark yellowish brown, with a black pupil. But the most distinguishing part of their physiognomy, is the peculiar flatness and width of their forehead, a peculiarity which they owe to one of those customs by which nature is sacrificed to fantastic ideas of beauty. The custom, indeed, of flattening the head by artificial pressure during infancy, prevails among all the nations we have seen west of the Rocky mountains. To the east of that barrier, the fashion is so perfectly unknown, that there the western Indians, with the exception of the Alliatan or Snake nation, are designated by the common name of Flatheads. This singular usage, which nature could scarcely seem to suggest to remote nations, might perhaps incline us to believe in the common and not very ancient origin of all the western nations. Such an opinion might well accommodate itself with the fact, that while on the lower parts of the Columbia, both sexes are universally flatheads, the custom diminishes in receding eastward, from the common centre of the infection, till among the remoter tribes near the mountains, nature recovers her rights, and the wasted folly is confined to a few females. Such opinions, however, are corrected or weakened by considering that the flattening of the head is not, in fact, peculiar to that part of the continent, since it was among the first objects which struck the attention of Columbus.

But wherever it may have begun, the practice is now universal among these nations. Soon after the birth of her child, the mother, anxious to procure for her infant the recommendation of a broad forehead, places it in the compressing machine, where it is kept for ten or twelve months; though the females remain longer than the boys. The operation is so gradual, that it is not attended with pain; but the impression is deep and permanent. The heads of the children, when they are released from the bandage, are not more than two inches thick about the upper edge of the forehead, and still thinner above: nor with all its efforts can nature ever restore its shape; the heads of grown persons being often in a straight line from the nose to the top of the forehead.

The hair of both sexes is parted at the top of the head, and thence falls loosely behind the ears, over the back and shoulders. They use combs, of which they are very fond, and, indeed, contrive without the aid of them, to keep their hair in very good order. The dress of the man consists of a small robe, reaching

to the middle of the thigh, tied by a string across the breast, with its corners hanging loosely over their arms. These robes are, in general, composed of the skins of a small animal, which we have supposed to be the brown mungo. They have, besides, those of the tiger, cat, deer, panther, bear, and elk, which last is principally used in war parties. Sometimes they have a blanket woven with the fingers, from the wool of their native sheep; occasionally a mat is thrown over them to keep off rain; but except this robe, they have no other article of clothing during winter or summer, so that every part of the body, but the back and shoulders, is exposed to view. They are very fond of the dress of the whites, whom they call pashisheooks or clothmen; and whenever they can procure any clothes, wear them in our manner: the only article, indeed, which we have not seen among them is the shoe.

The robe of the women is like that worn by the men, except that it does not reach below the waist. Those most esteemed are made of strips of sea-otter skin, which being twisted are interwoven with silk-grass, or the bark of the white cedar, in such a manner that the fur appears equally on both sides, so as to form a soft and warm covering. The skins of the racoon or beaver are also employed in the same way, though on other occasions these skins are simply dressed in the hair, and worn without further preparation. The garment which covers the body from the waist as low as the knee before and the thigh behind, is the tissue already described, and is made either of the bruised bark of white cedar, the twisted cords of silk-grass, or of flags and rushes. Neither leggings nor moccasins are ever used, the mildness of the climate not requiring them as a security from the weather, and their being so much in the water rendering them an incumbrance. The only covering for the head is a hat made of bear-grass, and the bark of cedar, interwoven in a conic form, with a knob of the same shape at the top. It has no brim, but is held on the head by a string passing under the chin, and tied to a small rim inside of the hat. The colours are generally black and white only, and these are made into squares, triangles, and sometimes rude figures of canoes and seamen harpooning whales. This is all the usual dress of females; but if the weather be unusually severe, they add a vest formed of skins like the robe, tied behind, without any shoulder-straps to keep it up. As this vest covers the body from the armpits to the waist, it conceals the breasts, but on all other occasions they are suffered to remain loose and exposed, and present, in old women especially, a most disgusting appearance.

Sometimes, though not often, they mark their skins by puncturing and introducing some coloured matter: this ornament is chiefly confined to the women, who imprint on their legs and arms, circular or parallel dots. On the arm of

one of the squaws we read the name of J. Bowman, apparently a trader who visits the mouth of the Columbia. The favourite decoration however of both sexes, are the common coarse blue or white beads, which are folded very tightly round their wrists and ankles, to the width of three or four inches, and worn in large loose rolls round the neck, or in the shape of ear-rings, or hanging from the nose, which last mode is peculiar to the men. There is also a species of wampum very much in use, which seems to be worn in its natural form without any preparation. Its shape is a cone somewhat curved, about the size of a raven's quill at the base, and tapering to a point, its whole length being from one to two and a half inches, and white, smooth, hard, and thin. A small thread is passed through it, and the wampum is either suspended from the nose, or passed through the cartilage horizontally, and forms a ring, from which other ornaments hang. This wampum is employed in the same way as the beads, but is the favourite decoration for the noses of the men. The men also use collars made of bears' claws, the women and children those of elks tusks, and both sexes are adorned with bracelets of copper, iron, or brass, in various forms.

Yet all these decorations are unavailing to conceal the deformities of nature and the extravagance of fashion; nor have we seen any more disgusting object than a Chinook or Clatsop beauty in full attire. Their broad flat foreheads, their falling breasts, their ill-shaped limbs, the awkwardness of their positions, and the filth which intrudes through their finery; all these render a Chinook or Clatsop beauty in full attire, one of the most disgusting objects in nature. Fortunately this circumstance conspired with the low diet and laborious exercise of our men, to protect them from the persevering gallantry of the fair sex, whose kindness always exceeded the ordinary courtesies of hospitality. Among these people, as indeed among all Indians, the prostitution of unmarried women is so far from being considered criminal or improper, that the females themselves solicit the favours of the other sex, with the entire approbation of their friends and connexions. The person is in fact often the only property of a young female, and is therefore the medium of trade, the return for presents, and the reward for services. In most cases, however, the female is so much at the disposal of her husband or parent, that she is farmed out for hire. The Chinook woman, who brought her six female relations to our camp, had regular prices, proportioned to the beauty of each female; and among all the tribes, a man will lend his wife or daughter for a fish-hook or a strand of beads. To decline an offer of this sort is indeed to disparage the charms of the lady, and therefore gives such offence, that although we had occasionally to treat the

Indians with rigour, nothing seemed to irritate both sexes more than our refusal to accept the favours of the females. On one occasion we were amused by a Clatsop, who having been cured of some disorder by our medical skill, brought his sister as a reward for our kindness. The young lady was quite anxious to join in this expression of her brother's gratitude, and mortified that we did not avail ourselves of it, she could not be prevailed on to leave the fort, but remained with Chaboneau's wife, in the next room to ours, for two or three days, declining all the solicitations of the men, till finding, at last, that we did not relent, she went away, regretting that her brother's obligations were unpaid.

The little intercourse which the men have had with these women is, however, sufficient to apprise us of the prevalence of the venereal disease, with which one or two of the party had been so much afflicted, as to render a salivation necessary. The infection in these cases was communicated by the Chinook women. The others do not appear to be afflicted with it to any extent: indeed, notwithstanding this disorder is certainly known to the Indians on the Columbia, yet the number of infected persons is very inconsiderable. The existence of such a disorder is very easily detected, particularly in the men, in their open style of dress; yet in the whole route down the Columbia, we have not seen more than two or three cases of gonorrhœa, and about double that number of lues venerea. There do not seem to be any simples which are used as specifics in this disorder, nor is a complete cure ever effected. When once a patient is seized, the disorder ends with his life only; though from the simplicity of their diet, and the use of certain vegetables, they support it for many years with but little inconvenience, and even enjoy tolerable health; yet their life is always abridged by decrepitude or premature old age. The Indians, who are mostly successful in treating this disorder, are the Chippeways. Their specifics are the root of the lobelia, and that of a species of sumac, common to the United States, the neighbourhood of the Rocky mountains, and to the countries westward, and which is readily distinguished by being the smallest of its kind, and by its winged rib, or common footstalk, supporting leaves oppositely pinnate. Decoctions of the roots are used very freely, without any limitation, and are said to soften the violence of the lues, and even to be sovereign in the cure of the gonorrhœa.

The Clatsops and other nations at the mouth of the Columbia, have visited us with great freedom, and we have endeavoured to cultivate their intimacy, as well for the purpose of acquiring information, as to leave behind us impressions favourable to our country. Having acquired much of their language, we are enabled, with the assistance of gestures, to hold conversations with great ease.

We find them inquisitive and loquacious, with understandings by no means deficient in acuteness, and with very retentive memories; and though fond of feasts, and generally cheerful, they are never gay. Every thing they see excites their attention and inquiries, but having been accustomed to see the whites, nothing appeared to give them more astonishment than the air-gun. To all our inquiries they answer with great intelligence, and the conversation rarely slackens, since there is a constant discussion of the events, and trade, and politics, in the little but active circle of Killamucks, Clatsops, Cathlamahs, Wahkiacums, and Chinooks. Among themselves, the conversation generally turns on the subjects of trade, or smoking, or eating, or connexion with females, before whom this last is spoken of with a familiarity which would be in the highest degree indecent, if custom had not rendered it inoffensive.

The treatment of women is often considered as the standard by which the moral qualities of savages are to be estimated. Our own observation, however, induced us to think that the importance of the female in savage life has no necessary relation to the virtues of the men, but is regulated wholly by their capacity to be useful. The Indians, whose treatment of the females is mildest, and who pay most deference to their opinions, are by no means the most distinguished for their virtues; nor is this deference attended by any increase of attachment, since they are equally willing with the most brutal husband, to prostitute their wives to strangers. On the other hand, the tribes among whom the women are very much debased, possess the loftiest sense of honour, the greatest liberality, and all the good qualities of which their situation demands the exercise. Where the women can aid in procuring subsistence for the tribe, they are treated with more equality, and their importance is proportioned to the share which they take in that labour; while in countries where subsistence is chiefly procured by the exertions of the men, the women are considered and treated as burdens. Thus, among the Clatsops and Chinooks, who live upon fish and roots, which the women are equally expert with the men in procuring, the former have a rank and influence very rarely found among Indians. The females are permitted to speak freely before the men, to whom indeed they sometimes address themselves in a tone of authority. On many subjects their judgments and opinions are respected, and in matters of trade, their advice is generally asked and pursued. The labours of the family, too, are shared almost equally. The men collect wood and make fires, assist in cleansing the fish, make the houses, canoes, and wooden utensils; and whenever strangers are to be entertained, or a great feast prepared, the meats are cooked and served up by the men. The peculiar province of the female is to col-

lect roots, and to manufacture the various articles which are formed of rushes, flags, cedar-bark, and bear-grass; but the management of the canoes, and many of the occupations, which elsewhere devolve wholly on the female, are here common to both sexes.

The observation with regard to the importance of females applies with equal force to the treatment of old men. Among tribes who subsist by hunting, the labours of the chase, and the wandering existence to which that occupation condemns them, necessarily throws the burden of procuring provisions on the active young men. As soon, therefore, as a man is unable to pursue the chase, he begins to withdraw something from the precarious supplies of the tribe. Still, however, his counsels may compensate his want of activity; but in the next stage of infirmity, when he can no longer travel from camp to camp, as the tribe roams about for subsistence, he is then found to be a heavy burden. In this situation they are abandoned among the Sioux, Assiniboins, and the hunting tribes on the Missouri. As they are setting out for some new excursion, where the old man is unable to follow, his children, or nearest relations, place before him a piece of meat and some water, and telling him that he has lived long enough, that it is now time for him to go home to his relations, who could take better care of him than his friends on earth, leave him, without remorse, to perish, when his little supply is exhausted. The same custom is said to prevail among the Minnetarees, Abnahawas, and Ricaras, when they are attended by old men on their hunting excursions. Yet, in their villages, we saw no want of kindness to old men. On the contrary, probably because in villages the means of more abundant subsistence renders such cruelty unnecessary, the old people appear to be treated with attention, and some of their feasts, particularly the buffalo dances, were intended chiefly as a contribution for the old and infirm.

The dispositions of these people seem mild and inoffensive, and they have uniformly behaved to us with great friendship. They are addicted to begging and pilfering small articles, when it can be done without danger of detection, but do not rob wantonly, nor to any large amount; and some of them having purloined some of our meat, which the hunters had been obliged to leave in the woods, they voluntarily brought some dogs a few days after, by way of compensation. Our force and great superiority in the use of fire-arms, enable us always to command, and such is the friendly deportment of these people, that the men have been accustomed to treat them with the greatest confidence. It is therefore with difficulty that we can impress on our men a conviction of the necessity of being always on our guard, since we are perfectly acquainted with the treacherous character of

Indians in general. We are always prepared for an attack, and uniformly exclude all large parties of Indians from the fort. Their large houses usually contain several families, consisting of the parents, their sons and daughters-in-law, and grand children, among whom the provisions are common, and whose harmony is scarcely ever interrupted by disputes. Although polygamy is permitted by their customs, very few have more than a single wife, and she is brought immediately after the marriage into the husband's family, where she resides until increasing numbers oblige them to seek another house. In this state the old man is not considered as the head of the family, since the active duties, as well as the responsibility, fall on some of the younger members. As these families gradually expand into bands, or tribes, or nations, the paternal authority is represented by the chief of each association. This chieftain, however, is not hereditary; his ability to render service to his neighbours, and the popularity which follows it, is at once the foundation and the measure of his authority, the exercise of which does not extend beyond a reprimand for some improper action.

The harmony of their private life is indeed secured by their ignorance of spirituous liquors, the earliest and most dreadful present which civilization has given to the other natives of the continent. Although they have had so much intercourse with whites, they do not appear to possess any knowledge of these dangerous luxuries, at least they have never inquired after them, which they probably would have done if once they had been introduced among them. Indeed, we have not observed any liquor of an intoxicating quality used among these or any Indians west of the Rocky Mountains, the universal beverage being pure water. They, however, sometimes almost intoxicate themselves by smoking tobacco, of which they are excessively fond, and the pleasures of which they prolong as much as possible, by retaining vast quantities at a time, till after circulating through the lungs and stomach, it issues in volumes from the mouth and nostrils. But the natural vice of all these people is an attachment for games of hazard, which they pursue with a strange and ruinous avidity. The games are of two kinds. In the first, one of the company assumes the office of banker, and plays against the rest. He takes a small stone, about the size of a bean, which he shifts from one hand to the other with great dexterity, repeating at the same time a song adapted to the game, and which serves to divert the attention of the company, till having agreed on the stake, he holds out his hands, and the antagonist wins or loses as he succeeds or fails at guessing in which hand the stone is. After the banker has lost his money, or whenever he is tired, the stone is transferred to another, who in turn challenges the

rest of the company. The other game is something like the play of ninepins; two pins are placed on the floor, about the distance of a foot from each other, and a small hole made behind them. The players then go about ten feet from the hole, into which they try to roll a small piece resembling the men used at draughts; if they succeed in putting it into the hole, they win the stake; if the piece rolls between the pins, but does not go into the hole, nothing is won or lost; but the wager is wholly lost if the chequer rolls outside of the pins. Entire days are wasted at these games, which are often continued through the night round the blaze of their fires, till the last article of clothing, or even the last blue bead is won from the desperate adventurer.

In traffic they are keen, acute, and intelligent, and they employ in all their bargains a dexterity and finesse, which if it be not learnt from their foreign visitors, may show how nearly the cunning of savages is allied to the little arts of more civilized trade. They begin by asking double or treble the value of their merchandise, and lower the demand in proportion to the ardor or experience in trade of the purchaser; and if he expresses any anxiety, the smallest article, perhaps a handful of roots, will furnish a whole morning's negotiation. Being naturally suspicious, they of course conceive that you are pursuing the same system. They, therefore, invariably refuse the first offer, however high, fearful that they or we have mistaken the value of the merchandise, and therefore cautiously wait to draw us on to larger offers. In this way, after rejecting the most extravagant prices, which we have offered merely for experiment, they have afterwards importuned us for a tenth part of what they had before refused. In this respect, they differ from almost all Indians, who will generally exchange in a thoughtless moment the most valuable article they possess, for any bauble which happens to please their fancy.

These habits of cunning, or prudence, have been formed or increased by their being engaged in a large part of the commerce of the Columbia; of that trade, however, the great emporium is the Falls, where all the neighbouring nations assemble. The inhabitants of the Columbian plains, after having passed the winter near the mountains, come down as soon as the snow has left the valleys; and are occupied in collecting and drying roots, till about the month of May. They then crowd to the river, and fixing themselves on its north side, to avoid the incursions of the Snake Indians, continue fishing, till about the first of September, when the salmon are no longer fit for use. They then bury their fish and return to the plains, where they remain gathering quamash, till the snow obliges them to desist. They come back to the Columbia, and taking their store of fish, retire to the foot of the mountains, and along the creeks, which

supply timber for houses, and pass the winter in hunting deer or elk, which with the aid of their fish, enables them to subsist till, in the spring, they resume the circle of their employments. During their residence on the river, from May to September, or rather before they begin the regular fishery, they go down to the Falls, carrying with them skins, mats, silk grass, rushes and chappellell bread. They are here overtaken by the Chopunnish, and other tribes of the Rocky mountains, who descend the Kooskooskee and Lewis's river, for the purpose of selling bear-grass, horses, quamash and a few skins which they have obtained by hunting, or in exchange for horses, with the Tushepaws.

At the Falls, they find the Chilluckittequaws, Eneeshurs, Echeloots, and Skilloots, which last serve as intermediate traders or carriers between the inhabitants above and below the Falls. These tribes prepare pounded fish for the market, and the nations below bring wappatoo roots, the fish of the sea-coast, berries, and a variety of trinkets and small articles which they have procured from the whites.

The trade then begins. The Chopunnish, and Indians of the Rocky mountains, exchange the articles which they have brought for wappatoo, pounded fish, and beads. The Indians of the plains being their own fishermen, take only wappatoo, horses, beads, and other articles, procured from Europeans. The Indians, however, from Lewis's river to the Falls, consume as food or fuel all the fish which they take; so that the whole stock for exportation is prepared by the nations between the Towahnahiooks and the Falls, and amounts, as nearly as we could estimate, to about thirty thousand weight, chiefly salmon, above the quantity which they use themselves, or barter with the more eastern Indians. This is now carried down the river by the Indians at the Falls, and is consumed among the nations at the mouth of the Columbia, who in return give the fish of the seacoast, and the articles which they obtain from the whites. The neighbouring people catch large quantities of salmon and dry them, but they do not understand or practice the art of drying and pounding it in the manner used at the Falls, and being very fond of it, are forced to purchase it at high prices. This article, indeed, and the Wappatoo, form the principal subjects of trade with the people of our immediate vicinity. The traffic is wholly carried on by water; there are even no roads or paths through the country, except across the portages which connect the creeks.

But the circumstance which forms the soul of this trade, is the visit of the whites. They arrive generally about the month of April, and either remain until October, or return at that time; during which time, having no establishment on shore, they anchor on the north side of the bay, at the place already described,

which is a spacious and commodious harbour, perfectly secure from all, except the south and south-east winds; and as they leave it before winter, they do not suffer from these winds, which, during that season, are the most usual and the most violent. This situation is recommended by its neighbourhood to fresh water and wood, as well as to excellent timber for repairs. Here they are immediately visited by the tribes along the seacoast, by the Cathlamahs, and lastly by the Skilloots, that numerous and active people, who skirt the river between the marshy islands and the grand rapids, as well as the Coweliskee, and who carry down the fish prepared by their immediate neighbours the Chilluckittequaws, Eneeshurs, and Echeeloots, residing from the grand rapids to the Falls, as well as all the articles which they have procured in barter at the market in May. The accumulated trade of the Columbia now consists of dressed and undressed skins of elk, sea otter, the common otter, beaver, common fox, spunk, and tiger cat. The articles of less importance, are a small quantity of dried or pounded salmon, the biscuits made of the chappel roots and some of the manufactures of the neighbourhood. In return they receive guns (which are principally old British or American muskets) powder, ball and shot, copper and brass kettles, brass tea-kettles, and coffee-pots, blankets, from two to three points, coarse scarlet and blue cloth, plates and strips of sheet copper and brass, large brass wire, knives, tobacco, fish-hooks, buttons, and a considerable quantity of 'sailors' hats, trowsers, coats and shirts. But as we have had occasion to remark more than once, the objects of foreign trade which are the most desired, are the common cheap, blue or white beads, of about fifty or seventy to the penny weight, which are strung on strands a fathom in length, and sold by the yard or the length of both arms: of these the blue beads, which are called tia com-mashuck, or chief beads, hold the first rank in their ideas of relative value: the most inferior kind, are esteemed beyond the finest wampum, and are temptations which can always seduce them to part with their most valuable effects. Indeed, if the example of civilized life did not completely vindicate their choice, we might wonder at their infatuated attachment to a bauble in itself so worthless. Yet these beads are, perhaps, quite as reasonable objects of research as the precious metals, since they are at once beautiful ornaments for the person, and the great circulating medium of trade with all the nations on the Columbia.

These strangers who visit the Columbia for the purpose of trade or hunting, must be either English or Americans. The Indians inform us that they speak the same language as we do, and indeed the few words which the Indians have learnt from the sailors, such as musket, powder, shot, knife, fire, heave the land, damned rascal, and other phrases of that description, evidently show that the visitors speak the English language. But as the greater part of them annually

arrive in April, and either remain till autumn, or revisit them at that time, which we could not clearly understand, the trade cannot be direct from either England or the United States, since the ships could not return thither during the remainder of the year. When the Indians are asked where these traders go on leaving the Columbia, they always point to the south-west, whence we presume that they do not belong to any establishment at Nootka Sound. They do, however, mention a trader by the name of Moore, who sometimes touches at this place, and the last time he came, he had on board three cows; and when he left them, continued along the north-west coast, which renders it probable, that there may be a settlement of whites in that direction. The names and description of all these persons who visit them in the spring and autumn are remembered with great accuracy, and we took down, exactly as they were pronounced, the following list: The favourite trader is

Mr. Haley, who visits them in a vessel with three masts, and continues some time. The others are

Youens, who comes also in a three masted vessel, and is a trader.

Tallamon, in a three masted vessel, but he is not a trader.

Callalamet in a ship of the same size; he is a trader, and they say has a wooden leg.

Swipton	three masted vessel,	trader.
Moore	four do.	do.
Mackey	three do.	do.
Washington	three do.	do.
Mesship	three do.	do.
Davidson	three do.	does not trade, but hunts elk.
Jackson	three do.	trader.
Bolch	three do.	do.

Skelley, also a trader, in a vessel with three masts, but he has been gone for some years. He had only one eye.

It might be difficult to adjust the balance of the advantages or the dangers of this trade to the nations of the Columbia, against the sale of their furs, and the acquisition of a few bad guns and household utensils.

The nations near the mouth of the Columbia enjoy great tranquillity; none of the tribes being engaged in war. Not long since, however, there was a war on the coast to the south-west, in which the Killamucks took several prisoners. These, as far as we could perceive, were treated very well, and though nominally slaves, yet were adopted into the families of their masters, and the young ones placed on the same footing with the children of the purchaser.

The month of February and the greater part of March were passed in the same manner. Every day, parties as large as we could spare them from our other occupations were sent out to hunt, and we were thus enabled to command some days' provision in advance. It consisted chiefly of deer and elk; the first is very lean, and the flesh by no means as good as that of the elk, which, though poor, is getting better: it is indeed our chief dependence. At this time of the year it is in much better order in the prairies near the point, where they feed on grass and rushes, considerable quantities of which are yet green, than in the woody country up the Netul. There, they subsist on huckleberry bushes and fern, but chiefly on evergreen, called shallun, resembling the laurel, which abounds through all the timbered lands, particularly along the broken sides of hills. Towards the latter end of the month, however, they left the prairies near Point Adams, and retired back to the hills; but fortunately, at the same time the sturgeon and anchovies began to appear, and afforded us a delightful variety of food. In the mean time, the party on the seacoast supplied us with salt: but though the kettles were kept boiling all day and night, the salt was made but slowly; nor was it till the middle of this month that we succeeded in procuring twenty gallons, of which twelve were put in kegs for our journey as far as the deposits on the Missouri.

The neighbouring tribes continued to visit us, for the purpose of trading, or merely to smoke with us. But on the 21st, a Chinook chief, whom we had never seen, came over with twenty-five of his men. His name was Tahcum, a man of about fifty years of age, with a larger figure and a better carriage than most of his nation. We received him with the usual ceremonies, gave the party something to eat, smoked most copiously with them all, and presented the chief with a small medal. They were all satisfied with their treatment; and though we were willing to show the chief every civility, could not dispense with our rule of not suffering so many strangers to sleep in the fort. They, therefore, left us at sunset. On the twenty-fourth, Comowool, who is by far the most friendly and decent savage we have seen in this neighbourhood, came with a large party of Clatsops, bringing among other articles, sturgeon and a small fish, which has just begun, within a day or two past, to make its appearance in the Columbia.

From this time, as the elk became scarce and lean, we made use of these fish whenever we could catch them, or purchase them from the Indians. But as we were too poor to indulge very largely in these luxuries, the diet was by no means pleasant, and to the sick, especially, was unwholesome. On the 15th of March we were visited by Delashilwilt, the Chinook chief, and his wife, accom-

panied by the same six damsels, who in the autumn had encamped near us, on the other side of the bay, and whose favours had been so troublesome to several of the men. They formed a camp close to the fort, and began to renew their addresses very assiduously, but we warned the men of the dangers of intercourse with this frail society, and they cautiously abstained from connexion with them.

During the greater part of this month, five or six of the men were sick ; indeed, we have not had so many complaining since we left Wood river ; the general complaint is a bad cold and fever, something in the nature of an influenza, which, joined with a few cases of venereal, and accidental injuries, complete our invalid corps. These disorders may chiefly be imputed to the nature of the climate.

CHAP. XXIV.

A GENERAL DESCRIPTION OF THE BEASTS, BIRDS AND PLANTS, &c. FOUND BY THE PARTY IN THIS EXPEDITION.

THE vegetable productions of the country, which furnish a large proportion of the food of the Indians, are the roots of a species of thistle, the fern, the rush, the liquorice, and a small cylindric root, resembling in flavour and consistency the sweet potatoe.

1st. The thistle, called by the natives shanatanque, is a plant which grows in a deep, rich, dry loam, with a considerable mixture of sand. The stem is simple, ascending, cylindric, and hispid, and rising to the height of three or four feet. The cauline life, which, as well as the stem of the last season, is dead, is simple, crenate, and oblong; rather more obtuse at its apex than at its insertion, which is decurrent, and its position declining; whilst the margin is armed with prickles, and its disk is hairy. The flower too is dry and mutilated; but the pericarp seems much like that of the common thistle. The root-leaves, which still possess their verdure, and are about half grown, are of a pale green colour. The root, however, is the only part used. It is from nine to fifteen inches long, about the size of a man's thumb, perpendicular, fusiform, and with from two to four radicles. The rind is of a brown colour, and somewhat rough. When first taken from the earth, it is white, and nearly as crisp as a carrot, and in this state is sometimes eaten without any preparation. But after it is prepared by the same process used for the pascheco quamash, which is the most usual and the best method, it becomes black, and much improved in flavour. Its taste is exactly that of sugar, and it is indeed the sweetest vegetable employed by the Indians. After being baked in the kiln, it is either eaten simply or with train oil: sometimes pounded fine and mixed with cold water, until it is reduced to the consistence of sagamity, or Indian mush, which last method is the most agreeable to our palates.

2. Three species of fern grow in this neighbourhood, but the root of only one is eaten. It is very abundant in those parts of the open lands and prairies which have a deep, loose, rich, black loam, without any sand. There, it attains the height of four or five feet, and is a beautiful plant with a fine green colour in summer. The stem, which is smooth, cylindric, and slightly grooved on one side, rises erectly about half its height, when it divides into two branches, or rather long footstalks, which put forth in pairs from one side only, and near the edges of the groove, declining backwards from the grooved side. These footstalks are themselves grooved and cylindric, and as they gradually taper towards the extremities, put forth others of a smaller size, which are alternate, and have forty or fifty alternate, pinnate, horizontal, and sessile leaves: the leaves are multipartite for half the length of their footstalk, when they assume the tongue-like form altogether; being, moreover, revolute, with the upper disk smooth, and the lower resembling cotton: the top is annual, and therefore dead at present, but it produces no flower or fruit: the root itself is perennial and grows horizontally: sometimes a little diverging, or obliquely descending, and frequently dividing itself as it proceeds, and shooting up a number of stems. It lies about four inches under the surface of the earth, in a cylindrical form, with few or no radicles, and varies from the size of a goose quill to that of a man's finger. The bark is black, thin, brittle, and rather rough, and easily separates in flakes from the part which is eaten: the centre is divided into two parts by a strong, flat, and white ligament, like a piece of thin tape; on each side of which is a white substance, resembling, after the root is roasted, both in appearance and flavour, the dough of wheat. It has, however, a pungency which is disagreeable, but the natives eat it voraciously, and it seems to be very nutritious.

3. The rush is most commonly used by the Killamucks, and other Indians on the seacoast, along the sands of which it grows in the greatest abundance. From each root a single stem rises erectly to the height of three or four feet, somewhat thicker than a large quill, hollow and jointed; about twenty or thirty long, lineal, stellate, or radiate and horizontal leaves surround the stem at each joint, about half an inch above which, its stem is sheathed like the sand rush. When green, it resembles that plant also in appearance, as well as in having a rough stem. It is not branching; nor does it bear, as far as we can discover, either flower or seed. At the bottom of this stem, which is annual, is a small, strong radicle, about an inch long, descending perpendicularly to the root, while just above the junction of the radicle with the stem, the latter is surrounded in the form of a wheel with six or nine small radicles, descending ob-

liquely : the root attached to this radicle is a perennial solid bulb, about an inch long, and of the thickness of a man's thumb, of an ovate form, depressed on one or two of its sides, and covered with a thin, smooth, black rind : the pulp is white, brittle, and easily masticated. It is commonly roasted, though sometimes eaten raw ; but in both states is rather an insipid root.

4. The liquorice of this country does not differ from that common to the United States. It here delights in a deep, loose, sandy soil, and grows very large, and abundantly. It is prepared by roasting in the embers, and pounding it slightly with a small stick, in order to separate the strong ligament in the centre of the root, which is then thrown away, and the rest chewed and swallowed. In this way it has an agreeable flavour, not unlike that of the sweet potatoe. The root of the cattail, or cooper's flag, is eaten by the Indians. There is also, a species of small, dry, tuberous root, two inches in length, and about the thickness of the finger. They are eaten raw; are crisp, milky, and of an agreeable flavour.

5. Beside the small cylindric root mentioned above, is another of the same form and appearance, which is usually boiled and eaten with train oil. Its taste, however, is disagreeably bitter. But the most valuable of all the Indian roots, is

6. The wappatoo, or the bulb of the common *sagittifolia*, or common arrow-head. It does not grow in this neighbourhood, but is in great abundance in the marshy grounds of that beautiful valley, which extends from near Quicksand river for seventy miles westward, and is a principal article of trade between the inhabitants of that valley and those of the sea coast.

The shrub rises to the height of four or five feet ; the stem simple and much branched. The bark is of a reddish dark brown ; the main stem somewhat rough, while that of the bough is smooth ; the leaf is about one tenth of an inch long, obtuse at the apex, and acute and angular at the insertion of the pedicle. The leaf is three fourths of an inch in length, and three eighths in width, smooth, and of a paler green than evergreens generally are. The fruit is a small deep purple berry, and of a pleasant flavour ; the natives eat the berry when ripe, but seldom collect such quantities as to dry for winter use.

The native fruits and berries in use among the Indians, are what they call the shallun ; the solme ; the cranberry ; a berry like the black haw ; the scarlet berry, of the plant called *sacacommis* ; a purple berry, like the huckleberry.

1. The shallun is an evergreen plant, abounding in this neighbourhood, and its leaves are the favourite food of the elk. It is a thick growth, cylindrically rising to the height of three, and sometimes five feet, and varying from the size

of a goose quill, to that of a man's thumb. The stem is simple, branching, reclining, and partially fluxuose, with a bark which, on the elder part, is of a reddish brown colour, while the younger branches are red where exposed to the sun, and green elsewhere. The leaf is three fourths of an inch in length, and two and a half in breadth; of an oval form; the upper disk of a glossy deep green, the under of a pale green; the fruit is a deep purple berry, about the size of a common black cherry, oval, and rather bluntly pointed; the pericarp is divided into five acute angular points, and envelops a soft pulp, containing a great number of small brown seeds.

2. The solme is a small, pale, red berry, the production of a plant, resembling in size and shape that which produces the fruit, called in the United States, Solomon's sealberry. The berry is attached to the stem in the same manner. It is of a globular form; containing a soft pulp, which envelops four seeds about the size of the seed of the common small grape. It grows amongst the woodland moss, and is, to all appearance, an annual plant.

3. The cranberry is of the low and viny kind, and grows in the marshes or bogs of this neighbourhood: it is precisely the same as the cranberry of the United States.

4. The fruit, which, though rather larger, resembles in shape the black haw, is a light brown berry, the fruit of a tree about the size, shape, and appearance in every respect, of that of the United States, called the wild crab-apple. The leaf is also precisely the same, as also the bark in texture and colour. The berries grow in clumps at the end of the small branches; each berry supported by a separate stem, and as many as from three to eighteen or twenty in a clump: the berry is ovate, with one of its extremities attached to a peduncle, where it is to a small degree concave, the wood of which is excessively hard. The natives make their wedges of this wood, in splitting their boards, their firewood, and in hollowing out their canoes; the wedge when driven into solid dry pine, receives not the slightest injury. Our party made use of it likewise for wedges and axe-handles. The fruit is exceedingly acid, and resembles the flavour of the wild crab. The pericarp of the berry contains a soft pulpy substance, divided into four cells, each containing a single seed; the outer coat of the pericarp, is a thin, smooth, though firm and tough pellicle.

The plant called *sacacommis* by the Canadian traders, derives its name from this circumstance, that the clerks of the trading companies are generally very fond of smoking its leaves, which they carry about with them in a small bag. It grows generally in an open piny woodland country, or on its borders. We found this berry in the prairies bordering on the Rocky mountains, or in the more

open woodlands. It is indiscriminately the growth of a very rich or a very poor soil, and is found in the same abundance in both. The natives on the western side of the Rocky mountains are very fond of this berry, although to us it was a very tasteless and insipid fruit: the shrub is an evergreen, and retains its verdure in the same perfection the whole season round. However inclement the climate, the root puts forth a great number of stems which separate near the surface of the ground, each stem from the size of a small quill to that of a man's finger: these are much branched, the branches forming an acute angle with the stem, and all more properly procumbent than creeping: although it sometimes puts forth radicles from the stems and branches, which strike obliquely into the ground: these radicles are by no means general or equable in their distances from each other, nor do they appear calculated to furnish nutriment to the plant: the bark is formed of several layers of a smooth, thin, brittle and reddish substance easily separated from the stem: the leaves with respect to their position are scattered, yet closely arranged, and particularly near the extremities of the twigs: the leaf is about three fourths of an inch in length; oval, pointed and obtuse; of a deep green, slightly grooved; and the footstalk is of proportionable length: the berry is attached in an irregular manner to the small boughs among the leaves, and always supported by separate, small and short peduncles: the insertion produces a slight concavity in the berry, while its opposite side is slightly convex. The outer coat of the pericarp is a thin, firm, tough pellicle: the inner coat consists of a dry, mealy powder, of a yellowish white colour, enveloping from four to six large, light, brown seeds: the colour of the fruit is a fine scarlet: the natives eat these berries without any preparation: the fruit ripens in September, and remains on the bushes all winter unaffected by the frost: they are sometimes gathered and hung in the lodges in bags, where they are dried without further trouble.

6. The deep purple berry, like the huckleberry, terminates bluntly, and has a cap or cover at the end: the berries are attached separately to the sides of the boughs by a short stem, hanging underneath, and they often grow very near each other, on the same bough: the berry separates very easily from the stem; the leaves adhere closely: the shrub rises to the height of six or eight feet, and sometimes grows on high lands, but more frequently on low marshy grounds: the shrub is an evergreen, and about ten inches in circumference, divides into many irregular branches, and seldom more than one stem springs from one root, although they associate very thickly: the bark is somewhat rough and of a reddish brown colour: the wood is very hard: the leaves are alternate and

attached by a short footstalk to the horizontal sides of the boughs: the form is a long oval, rather more acute towards the apex than at the point of insertion: its margin slightly serrate, its sides collapsing, thick, firm, smooth, and glossy: the under surface is of a pale or whitish green, and the upper of a fine deep green. This beautiful shrub retains its verdure throughout the year, and is more peculiarly beautiful in winter. The natives sometimes eat the berries without preparation: sometimes they dry them in the sun, and at others in their sweating kilns: they very frequently pound them, and bake them in large loaves, weighing from ten to fifteen pounds: the bread keeps very well for one season, and retains its juices better by this mode of preparation than any other: this bread when broken is stirred in cold water, until it acquires the consistency of soup, and then eaten.

The trees of a larger growth are very abundant; the whole neighbourhood of the coast is supplied with great quantities of excellent timber. The predominating growth is the fir, of which we have seen several species. There is one singular circumstance attending all the pine of this country, which is, that when consumed it yields not the slightest particle of ashes. The first species grows to an immense size, and is very commonly twenty-seven feet in circumference, six feet above the earth's surface: they rise to the height of two hundred and thirty feet, and one hundred and twenty of that height without a limb. We have often found them thirty-six feet in circumference. One of our party measured one, and found it to be forty-two feet in circumference, at a point beyond the reach of an ordinary man. This trunk for the distance of two hundred feet was destitute of limbs: this tree was perfectly sound, and at a moderate calculation, its size may be estimated at three hundred feet. The timber is throughout, and rives better than any other species; the bark scales off in flakes irregularly round, and of a reddish brown colour, particularly the younger growth: the trunk is simple, branching, and not very proliferous. The leaf is acerose, one tenth of an inch in width, and three fourths in length, firm, stiff, and acuminate. It is triangular, a little declining, thickly scattered on all sides of the bough, and springs from small triangular pedestals of soft, spongy, elastic bark at the junction of the boughs. The bud scales continue to encircle their respective twigs for several years. Captain Lewis has counted as many as the growth of four years beyond the scales; it yields but little rosin, and we have never been able to discover the cone, although we have killed several.

The second is a much more common species, and constitutes at least one half of the timber in this neighbourhood. It seems to resemble a spruce, rising from one hundred and sixty to one hundred and eighty feet, and is from four to

six in diameter, straight, round, and regularly tapering. The bark is thin, of a dark colour, much divided in small longitudinal interstices: the bark of the boughs and young trees is somewhat smooth, but not equal to the balsam fir: the wood is white, very soft, but difficult to rive: the trunk is a simple, branching, and diffuse stem, not so proliferous as the pines and firs usually are. It puts forth buds from the sides of the small boughs, as well as from their extremities: the stem terminates like the cedar, in a slender pointed top: the leaves are petiolate, the footstalks short, acerose, rather more than half a line in width, and very unequal in length; the greatest length seldom exceeds one inch, while other leaves intermixed on every bough, do not exceed a quarter of an inch. The leaf has a small longitudinal channel on the upper disk, which is of a deep and glossy green, while the under disk is of a whitish green only: it yields but little rosin. What is remarkable, the cone is not longer than the end of a man's thumb; it is soft, flexible, of an ovate form, and produced at the ends of the small twigs.

The third species resembles in all points, the Canadian balsam fir. It grows from two and a half to four feet in diameter, and rises to the height of eighty or an hundred feet. The stem is simple, branching, and proliferous: its leaves are sessile, acerous, one eighth of an inch in length, and one sixteenth in width, thickly scattered on the twigs, and adhere to the three under sides only; gibbous, a little declining, obtusely pointed, soft, and flexible. The upper disk is longitudinally marked with a slight channel, of a deep, glossy green; the under of a pale green and not glossy. This tree affords in considerable quantities, a fine deep aromatic balsam, resembling the balsam of Canada in taste and appearance. The small pistils filled, rise like a blister on the trunk and the branches. The bark that envelops these pistils, is soft and easily punctured: the general appearance of the bark is dark and smooth: but not so remarkable for that quality as the white pine of our country. The wood is white and soft.

The fourth species in size resembles the second. The stem is simple, branching, ascending, and proliferous; the bark is of a reddish dark brown, and thicker than that of the third species, divided by small longitudinal interstices, not so much magnified as in the second species. The relative position of the leaves resemble those of the balsam fir, excepting that they are only two-thirds the width, and little more than half the length, and that the upper disk is not so green and glossy. The wood yields no balsam, and but little rosin. The wood is white and tough although rather porous.

The fifth species in size resembles the second, and has a trunk simple, branching, and proliferous. The bark is of a thin dark brown, divided longitu-

dinally by interstices, and scaling off in thin rolling flakes. It yields but little balsam : two-thirds of the diameter of the trunk in the centre, presents a reddish white ; the remainder is white, porous, and tough : the twigs are much longer and more slender than in either of the other species ; the leaves are acerose, one-twentieth of an inch in width, and one inch in length ; sextile, inserted on all sides of the bough, straight, and obliquely pointing towards the extremities. The upper disk has a small longitudinal channel, and is of a deep green, and not so glossy as the balsam fir. The under disk is of a pale green.

We have seen a species of this fir on low marshy grounds, resembling in all points the foregoing, except that it branches more diffusively. This tree is generally thirty feet in height, and two in diameter. The diffusion of its branches may result from its open situation, as it seldom grows in the neighbourhood of another tree. The cone is two and a half inches in length, and three and three quarters in its greatest circumference. It tapers regularly to a point, and is formed of the imbricated scales, of a bluntly rounded form. A thin leaf is inserted in the pith of the cone, which overlays the centre of, and extends half an inch beyond the point of each scale.

The sixth species does not differ from what is usually denominated the white pine in Virginia. The unusual length of the cone seems to constitute the only difference. It is sometimes sixteen or eighteen inches in length, and is about four in circumference. It grows on the north side of the Columbia, near the ocean.

The seventh, and last species, grows in low grounds, and in places frequently overflowed by the tide, seldom rising higher than thirty-five feet, and not more than from two and a half to four in diameter : the stem is simple, branching, and proliferous : the bark resembles that of the first species, but more rugged : the leaves are acerose, two-tenths of an inch in width, three-fourths in length, firm, stiff, and a little acuminate : they end in short pointed tendrils, gibbous, and thickly scattered on all sides of the branch, though they adhere to the three under sides only : those inserted on the under side incline sidewise, with upward points, presenting the leaf in the shape of a sithe : the others are pointing upwards, sextile and like those of the first species, grow from the small triangular pedestals, of a bark, spungy, soft, and elastic. The under disk is of a deep glossy green, the other of a pale whitish green : the boughs retain the leaves of a six years growth : the bud scales resemble those of the first species : the cone is of an ovate figure, three and a half inches in length, and three in circumference, thickest in the middle, and tapering and terminating in two obtuse points : it is composed

of small, flexible scales, imbricated, and of a reddish brown colour. Each of these scales covers two small seeds, and is itself covered in the centre by a small, thin, inferior scale, acutely pointed: these scales proceed from the sides of the bough, as well as from its extremities. It was nowhere seen above the Wapatoö. The stem of the black alder arrives to a great size. It is simple, branching, and diffuse: the bark is smooth, of a light colour, with white spreading spots, resembling those of the beech: the leaf, fructification, &c. resemble precisely those of the common alder of our country: the shrubs grow separately from different roots, and not in clusters, like those of the United States. The black alder does not cast its leaf until the first of December. It is sometimes found growing to the height of sixty or seventy feet, and is from two to four in diameter.

3. There is a tree common to the Columbia river, below the entrance of Cataract river, when divested of its foliage, much resembling the ash. The trunk is simple, branching, and diffuse: the leaf is petiolate, plain, divided by four deep lines, and resembling those of the palm, and considerably lobate: the lobes terminate in from three to five angular points, and their margins are indented with irregular and somewhat circular incisures: the petiolate is cylindrical, smooth, and seven inches long; the leaf itself eight inches in length, and twelve in breadth: this tree is frequently three feet in diameter, and rises from forty to fifty feet: the fruit is a winged seed, somewhat resembling that of the maple.

In the same part of the country there is also another growth, resembling the white maple, though much smaller, and is seldom to be seen of more than six or seven inches in diameter. These trees grow in clusters, from fifteen to twenty feet in height, from the same bed of roots, spreading and leaning outwards: the twigs are long and slender, the stem simple and branching, the bark, in colour, resembling the white maple, the leaf is petiolate, plain, scattered, nearly circular, with acute, angular incisures round the margin, of an inch in length, and from six to eight in number: the acute angular points so formed, are crenate, three inches in length and four in width: the petiole is cylindric, smooth, and an inch and a quarter in length, and the fruit is not known.

The undergrowth consists of honeysuckles, alder, seven bark or nine bark, huckleberry, a shrub like the quillwood, a plant like the mountain-holly, a green briar, the fern.

1. The honeysuckle common to the United States we found in this neighbourhood. We first discovered the honeysuckle on the waters of the Kooskooskee, near the Chopunnish nation, and again below the grand rapids.

2. The alder, which is also common to our country, was found in great abundance in the woodlands, on this side of the Rocky mountains. It differs in the colour of its berry: this being of a pale sky blue, while that of the United States is of a deep purple

3. The seven bark, or, as it is usually denominated, the nine bark of the United States, is also common to this country.

4. The huckleberry. There is a species of huckleberry, common to the highlands, from the commencement of the Columbian valley to the sea-coast, rising to the height of six or eight feet, branching and diffuse: the trunk is cylindrical, of a dark brown colour; the collateral branches are green, smooth, and square, and put forth a number of alternate branches of the same colour, and from the two horizontal sides only. The fruit is a small deep purple berry, held in much esteem by the natives: the leaf is of a pale green, and small, three-fourths of an inch in length, and three-eighths in width, oval, terminating more acutely at the apex than at the insertion of the footstalk. the base is nearly entire, and but slightly serrate: the footstalks are short; their relative position is alternate, two-ranked, and proceeding from the horizontal sides of the boughs only.

5. There are two species of shrubs, first seen at the grand rapids of the Columbia, and which have since been seen elsewhere: they grow in rich dry grounds, usually in the neighbourhood of some water-course: the roots are creeping and cylindrical: the stem of the first species is from a foot to eighteen inches in height, and about as large as an ordinary goose quill: it is simple, unbranched, and erect: its leaves are cauline, compound, and spreading: the leaflets are jointed, and oppositely pinnate, three pair, and terminating in one sessile, widest at the base, and tapering to an acuminate point: it is an inch and a quarter in its greatest width, and three inches and a quarter in length: each point of the margin is armed with a subulate thorn, and from thirteen to seventeen in number: are veined, glossy, carinated and wrinkled: their points obliquely tending towards the extremity of the common footstalk: the stem of the second species is procumbent, about the size of that of the first species, jointed and unbranched: its leaves are cauline, compound, and oppositely pinnate: the rib is from fourteen to sixteen inches in length, cylindric and smooth: the leaflets are two inches and a half long, and one inch wide, and of the greatest width half an inch from the base: this they regularly surround, and from the same point tapering to an acute apex: this is usually terminated with a small subulate thorn: they are jointed and oppositely pinnate, consisting of six pair, and terminating in one: sessile, serrate, and ending in a small subulate

spire, from twenty-five to twenty-seven in number : they are smooth, plain, and of a deep green, and all obliquely tending towards the extremity of the footstalk : they retain their green all winter. The large leafed thorn, has a leaf about two inches and a half long, which is petiolate, and conjugate : the leaflets are petiolate, acutely pointed, having their margins cut with unequal and irregular incisures : the shrub, which we had once mistaken for the large leafed thorn, resembled the stem of that shrub, excepting the thorn : it bears a large three headed leaf : the briar is of the class polyandria, and order polygymnia : the flowers are single : the peduncle long and cylindrical : the calyx is a perianth, of one leaf, five cleft, and acutely pointed : the perianth is proper, erect, inferior in both petals, and germen : the corolla consists of five acute, pale scarlet petals, inserted in the receptacle with a short and narrow cleft : the corolla is smooth, moderately long, situated at the base of the germen, permanent, and in shape resembling a cup : the stamens and filaments are subulate, inserted into the receptacle, unequal and bent inwards, concealing the pistilium : the anther is two lobed and inflated, situated on the top of the filament of the pistilium : the germ is conical, imbricated, superior, sessile and short : the styles are short, compared with the stamen, capillary, smooth and obtuse : they are distributed over the surface of the germ, and deciduous without any perceptible stamen.

7. The green briar grows most abundantly in rich dry lands, in the vicinity of a water-course, and is found in small quantities in piny lands at a distance from the water. In the former situation the stem is frequently of the size of a man's finger, and rises perpendicularly four or five feet : it then descends in an arch, becomes procumbent, or rests on some neighbouring plants : it is simple, unbranched, and cylindric : in the latter situation it grows much smaller, and usually procumbent : the stem is armed with sharp and forked briars : the leaf is petiolate, ternate, and resembles in shape and appearance that of the purple raspberry, so common to the Atlantic states : the fruit is a berry resembling the blackberry in all points, and is eaten when ripe by the natives, which they hold in much esteem, although it is not dried for winter consumption. This shrub was first discovered at the entrance of Quicksand river : it grows so abundantly in the fertile valley of Columbia, and the islands, that the country is almost impenetrable : it retains its verdure late in summer.

8. Besides the fern already described, as furnishing a nutritibus root, there are two other plants of the same species, which may be divided into the large and the small : the large fern rises three or four feet : the stem is a common footstalk, proceeding immediately from the radix, somewhat flat, about the size of a man's arm, and covered with innumerable black coarse capillary radicles.

issuing from every part of its surface: one of these roots will send forth from twenty to forty of these common footstalks, bending outwards from the common centre: the ribs are cylindric, and marked longitudinally their whole length, with a groove on the upper side: on either side of this groove, and a little below its edge, the leaflets are inserted: these are shortly petiolate for about two-thirds the length of the middle rib, commencing from the bottom, and from thence to the extremity sessile: the rib is terminated by a single undivided lanceolate leaflet: these are from two to four inches in length, and have a small acute angular projection, and obliquely cut at the base: the upper surface is smooth, and of a deep green: the under surface of a pale green, and covered with a brown protuberance of a woolly appearance, particularly near the central fibre: the leaflets are alternately pinnate, and in number, from one hundred and ten to one hundred and forty: they are shortest at the two extremities of the common footstalk, largest in the centre, gradually lengthening, and diminishing as they succeed each other. The small fern rises likewise with a common footstalk from the radix, from four to eight in number: from four to eight inches long: the central rib is marked with a slight longitudinal groove throughout its whole length: the leaflets are oppositely pinnate, about one-third of the length of the common footstalk, from the bottom, and thence alternately pinnate: the footstalk terminates in a simple undivided lanceolate leaflet: these are oblong, obtuse, convex, absolutely entire, and the upper disk is marked with a slight longitudinal groove: near the upper extremity these leaflets are decursively pinnate, as are all those of the large fern. Both of these species remain green during the winter.

The quadrupeds of this country from the Rocky mountains to the Pacific ocean, may be conveniently divided into the domestic and the wild animals. The first embraces the horse and dog only.

The horse is confined principally to the nations inhabiting the great plains of the Columbia, extending from latitude forty to fifty north, and occupying the tract of territory lying between the Rocky mountains, and a range of mountains which pass the Columbia river about the Great Falls from longitude sixteen to one hundred and twenty-one west. The Shoshonees, the Chopunnish, Sokulks, Escheloots, Eneshures, and Chilluckittequaws, all enjoy the benefit of that docile, noble, and generous animal; and all of them, except the last three, possess immense numbers.

They appear to be of an excellent race, lofty, elegantly formed, active and durable: many of them appear like fine English coursers; some of them are pied, with large spots of white irregularly scattered, and intermixed with a dark

brown bay. the greater part, however, are of an uniform colour, marked with stars and white feet, and resemble in fleetness and bottom, as well as in form and colour, the best blooded horses of Virginia. The natives suffer them to run at large in the plains, the grass of which affords them their only winter subsistence; their masters taking no trouble to lay in a winter's store for them: nevertheless they will, unless much exercised, fatten on the dry grass afforded by the plains during the winter. The plains are rarely, if ever, moistened by rain, and the grass is consequently short and thin. The natives, excepting those of the Rocky mountains, appear to take no pains in selecting their male horses for breed; and indeed, those of that class appear much the most indifferent. Whether the horse was originally a native of this country or not, the soil and climate appear to be perfectly well adapted to the nature of this animal. Horses are said to be found wild in many parts of this extensive country. The several tribes of Shoshonees who reside towards Mexico, on the waters of the Mutlumah river, and particularly one of them, called Shaboboah, have also a great number of mules, which the Indians prize more highly than horses. An elegant horse may be purchased of the natives for a few beads or other paltry trinkets, which in the United States would not cost more than one or two dollars. The abundance and cheapness of horses, will be extremely advantageous to those who may hereafter attempt the fur trade to the East Indies, by the way of the Columbia river, and the Pacific ocean.

2. The dog is unusually small, about the size of an ordinary cur: he is usually parti-coloured, amongst which, the black, white, brown, and brindle, are the colours most predominant: the head is long, the nose pointed, the eyes small, the ears erect and pointed, like those of the wolf: the hair is short and smooth, excepting on the tail, where it is long and straight, like that of the ordinary cur dog. The natives never eat the flesh of this animal, and he appears to be in no other way serviceable to them than in hunting the elk.

The second division comprehends the brown, white, or grisly bear, the black bear; the deer, common red deer, the black-tailed fallow deer, the mule deer, the elk, the wolves, the large brown wolf, the small wolf of the plains, the tiger-cat, the foxes, the common red fox, the silver fox, the fisher or black fox, the large red fox of the plains, the kit-fox, or small fox of the plains, the antelope, the sheep, beaver, common otter, sea-otter, mink, seal, racoon, squirrels, large gray squirrel, small gray squirrel, small brown squirrel, ground squirrel, braro, rat, mouse, mole, panther, hare, rabbit, polecat or skunk.

First, the brown, white or grisly bear, which seem to be of the same family with an accidental variation of colour only, inhabit the timbered parts of the

Rocky mountains. They are rarely found on the western side, and are more commonly below the Rocky mountains, in the plains, or on their borders, amidst copses of brush and underwood, and near the water courses. We are unable to learn that they inhabit at all in the woody country bordering on the coast, as far in the interior as the range of mountains which pass the Columbia, between the great falls and the rapids of that river.

2. The black bear differs in no respect from those common to the United States. They chiefly inhabit timbered parts of the Rocky mountains, and likewise the borders of the great plains of the Columbia. They are sometimes found in the tract which lies between those plains and the Pacific ocean. One of our hunters saw one of this species, which was the only one we have discovered since our residence in Fort Clatsop.

3. The deer are of three kinds: the common red deer, the black-tailed fallow deer, and the mule deer.

1. The common red deer inhabit the rocky mountains, in the neighbourhood of the Chopunnish, and about the Columbia, and down the river as low as where the tide water commences. They do not appear to differ essentially from those of the United States, being the same in shape, size, and appearance. The tail is however different, which is of an unusual length, far exceeding that of the common deer. Captain Lewis measured one, and found it to be seventeen inches long.

2. The black-tailed fallow deer are peculiar to this coast, and are a distinct species, partaking equally of the qualities of the mule and the common deer. Their ears are longer, and their winter coat darker than those of the common deer. The receptacle of the eye more conspicuous, their legs shorter, their bodies thicker and larger. The tail is of the same length with that of the common deer, the hair on the under side white, and on its sides and top of a deep jetty black: the hams resemble in form and colour those of the mule, which it likewise resembles in its gait. The black-tailed deer never runs at full speed, but bounds with every foot from the ground, at the same time, like the mule deer. He sometimes inhabits the woodlands, but more often the prairies and open grounds. It may be generally said, that he is of a size larger than the common deer, and less than the mule deer. The flesh is seldom fat, and in flavour is far inferior to any other of the species.

3. The mule deer inhabit both the sea-coast and the plains of the Missouri, and likewise the borders of the Kooskooskee river, in the neighbourhood of the Rocky mountains. It is not known whether they exist in the interior of the great plains of the Columbia, or on the lower borders, near the mountains which

pass the river above the great Falls. The properties of this animal have already been noticed.

4. The elk is of the same species with that which inhabits much the greatest part of North America. They are common to every part of this country, as well the timbered land as the plains, but are much more abundant in the former than in the latter. In the month of March we discovered several which had not cast their horns, and others where the new horns had grown to the length of six inches. The latter were in much the best order, and from hence we draw the inference that the leanest elk retain their horns the longest.

5. The wolf is either the large brown wolf, or the wolf of the plains, of which last there are two kinds, the large and the small. The large brown wolf inhabits the woody countries on the borders of the Pacific, and the mountains which pass the Columbia river, between the great Falls and rapids, and resembles in all points those of the United States.

The large and small wolves of the plains principally inhabit the open country and the woodlands on their borders. They resemble, both in appearance and habit, those of the Missouri plains. They are by no means abundant in the plains of the Columbia, as they meet there but very little game for their subsistence.

6. The tiger-cat inhabits the borders of the plains, and the woody country in the neighbourhood of the Pacific. This animal is of a size larger than the wild cat of our country, and much the same in form, agility, and ferocity. The colour of the back, neck, and sides, is of a reddish brown, irregularly variegated with small spots of dark brown: the tail is about two inches long, and nearly white, except the extremity, which is black. It terminates abruptly, as if it had been amputated: the belly is white, and beautifully variegated with small black spots: the legs are of the same colour with the sides, and the back is marked transversely with black stripes: the ears are black on the outer side, covered with fine, short hair, except at the upper point, which is furnished with a pencil of hair, fine, straight, and black, three-fourths of an inch in length. The hair of this animal is long and fine, far exceeding that of the wild cat of the United States, but inferior in that quality to that of the bear of the north-west. The skin of this animal is in great demand amongst the natives, for of this they form their robes, and it requires four to make up the complement.

7. Of the foxes we have seen several species.

The large red fox of the plains, and the kit-fox or small red fox of the plains, are the same as are found on the banks of the Missouri. They are found

almost exclusively in the open plains, or on the tops of brush within the level country: the common red fox of the United States inhabits the country bordering the coast, nor does this animal appear to have undergone any alteration.

The black fox, or, as it is termed in the neighbourhood of Detroit, the fisher, is found in the woody country bordering on the coast. How it should have acquired this appellation it is difficult to imagine, as it certainly does not prey upon fish. These animals are extremely strong and active, and admirably expert in climbing: this they perform with the greatest ease, and bound from tree to tree in pursuit of the squirrel or racoon, their most usual food. Their colour is of a jetty black, excepting a small white spot upon the breast: the body is long, the legs short, and resembling those of the ordinary turnspit dog. The tail is remarkably long, and not differing in other particulars from that of the ordinary fox.

The silver fox is an animal very rare, even in the country he inhabits. We have seen nothing but the skins of this animal, and those in the possession of the natives of the woody country below the Columbia falls, which makes us conjecture it to be an inhabitant of that country exclusively. From the skin it appeared to be of the size of the large red fox of the plains, resembling that animal in form, and particularly in the dimensions of the tail. The legs Captain Lewis conjectured to be somewhat larger. It has a long deep lead-coloured fur, for foil, intermixed with long hairs, either of a white or black colour at the lower part, and invariably white at the top, forming a most beautiful silver gray. Captain Lewis thought this the most beautiful of the whole species, excepting one which he discovered on the Missouri, near the natural walls.

8. The antelope inhabits the great plains of the Columbia, and resembles those found on the banks of the Missouri, and indeed in every part of the untimbered country, but they are by no means so abundant on this as on the other side of the Rocky mountains. The natives in this place make themselves robes of their skins, and preserve the hair entire. In the summer and autumn, when the salmon begin to decline, the majority of the natives leave the sides of the river, and reside in the open plains, to hunt the antelope, which they pursue on horseback, and shoot with their arrows.

9. The sheep is found in many places, but mostly in the timbered parts of the Rocky mountains. They live in greater numbers on the chain of mountains forming the commencement of the woody country on the coast, and passing the

Columbia between the falls and rapids. We have only seen the skins of these animals, which the natives dress with the wool, and the blankets which they manufacture from the wool. The animal, from this evidence, appears to be of the size of our common sheep, of a white colour : the wool is fine on many parts of the body, but in length not equal to that of our domestic sheep. On the back, and particularly on the top of the head, this is intermixed with a considerable proportion of long straight hairs. From the Indian account, these animals have erect pointed horns : one of our engagees informed us that he had seen them in the black hills, and that the horns were lunated like those of our domestic sheep. We have nevertheless too many proofs to admit a doubt of their existing, and in considerable numbers on the mountains near the coast.

10. The beaver of this country is large and fat : the flesh is very palatable, and at our table was a real luxury. On the 7th of January, 1806, our hunter found a beaver in his traps, of which he made a bait for taking others : this bait will entice the beaver to the trap, as far as he can smell it, and this may be fairly stated to be at the distance of a mile, as their sense of smelling is very acute. To prepare beaver bait, the castor or bark stone is first gently pressed from the bladder-like bag which contains it, into a phial of four ounces, with a large mouth : five or six of these stones are thus taken, to which must be added a nutmeg, a dozen or fifteen cloves, and thirty grains of cinnamon, finely pulverized and stirred together, and as much ardent spirits added to the composition as will reduce the whole to the consistency of mustard. All this must be carefully corked, as it soon loses its efficacy if exposed to open air. The scent becomes much stronger in four or five days after preparation, and, provided proper precaution is exercised, will preserve its efficacy for months. Any strong aromatic spices will answer ; their sole virtue being to give variety and pungency to the scent of the bark stone. The male beaver has six stones, two of which contain a substance much like finely pulverized bark, of a pale yellow colour, and in smell resembling tanners' oose ; these are called bark stones or castors. Two others, which like the bark stone resemble small bladders, contain pure strong oil, of a strong rank smell, and are called the oil stone, and the other two are the testicles. The bark stones are two inches in length : the others are somewhat smaller, of an oval form, and lie in a bunch together, between the skin and the root of the tail, with which they are closely connected, and seem to communicate. The female brings forth once in a year only, and has sometimes two and sometimes four at a birth, which usually happens in the latter end of May and the beginning of June : at this time she is said to drive

the male from the lodge, who would otherwise destroy the young. They propagate like the fowl, by the gut, and the male has no other sexual distinction that we could discover.

11. The common otter has already been described, and this species does not differ from those inhabiting the other parts of America.

12. The sea-otter resides only on the sea-coast, or in the neighbourhood of the salt water. When fully grown, he arrives to the size of a large mastiff dog. The ears and eyes, particularly the former, which are not an inch in length, are thick, pointed, fleshy, and covered with short hair: the tail is ten inches long, thick at the point of insertion and partially covered with a deep fur on the upper side: the legs are very short, and the feet, which have five toes each, are broad, large, and webbed: the legs are covered with fur, and the feet with short hair: the body of this animal is long, and of the same thickness throughout: from the extremity of the tail to the nose they measure five feet. The colour is a uniform dark brown, and, when in good order and season, perfectly black. This animal is unrivalled for the beauty, richness, and softness of his fur: the inner part of the fur, when opened, is lighter than the surface in its natural position: there are some black and shining hairs intermixed with the fur, which are rather longer, and add much to its beauty: the fur about the ears, nose and eyes, in some of this species, presents a lighter colour, sometimes a brown: their young are often seen of a cream-coloured white about the nose, eyes and forehead, and which are always much lighter than their other parts: their fur is however much inferior to that of the full grown otter.

13. The mink inhabits the woody country bordering on the coast, and does not differ in any point from those of the United States.

14. The seal are found on this coast in great numbers, and as far up the Columbia river as the Great Falls, and none have been discovered beyond them. The skins of such as captain Lewis examined, were covered with a short, coarse, stiff, and glossy hair, of a reddish brown colour. This animal, when in the water, appeared of a black colour, and sometimes spotted with white. We believe that there are several species of this animal to be found in this country, but we could not procure a sufficient number to make the examination: the skins were precisely of the same kind as our countrymen employ in the manufacture of trunks.

15. The racoon inhabits woody countries bordering on the coast, in considerable numbers, and is caught by the natives with snares or pitfalls: they hold their skins in but little or no estimation, and very seldom make them into robes.

16. The squirrels we have seen, are,

The large gray squirrel. This animal appears to be an inhabitant of a narrow tract of country, well covered with whiteoak timber, and situated on the upper side of the mountains just below Columbia Falls. This animal we have only found in those tracts which have been covered with timber ; for in countries where pine is most abundant, he does not appear : he is much superior in size to the common gray squirrel, and resembles in form, colour and size, the fox squirrel of the Atlantic states : the tail exceeds the whole length of the body and the head : the eyes are dark, the whiskers long and black. the back sides of the head and tail, and outward part of the legs, are all of a blue coloured gray : the breast, belly, and inner part of the body, are all of a pure white : the hair is short, like that of the fox squirrel, though much finer, and intermixed with a portion of fur. The natives hold the skin of this animal in high estimation, which they use in forming their robes. He subsists on the acorn and filberts, which last grows in great abundance in the oak country.

The small gray squirrel is common to every part of the Rocky mountains where timber abounds. He differs from the dark brown squirrel in colour only. The back, sides, neck, head, tail and outer side of the legs, are of a brownish lead-coloured gray : the tail is slightly touched with a dark reddish colour, near the extremity of some of the hairs : the throat, breast, belly, and inner parts of the legs, are of the colour of a tanner's ooze, and have a narrow strip of black, commencing behind each shoulder, and entering longitudinally about three inches, between the colours of the sides and belly. Their habits are precisely those of the dark brown squirrel, and like them they are extremely nimble and active.

There is also a species of squirrel, evidently distinct, which we have denominated the burrowing squirrel. He inhabits these plains, and somewhat resembles those found on the Missouri : he measures one foot and five inches in length, of which the tail comprises two and a half inches only : the neck and legs are short ; the ears are likewise short, obtusely pointed, and lie close to the head, and the aperture larger than will generally be found among burrowing animals. The eyes are of a moderate size, the pupil black, and the iris of a dark sooty brown : the whiskers are full, long, and black : the teeth, and, indeed, the whole contour, resemble those of the squirrel : each foot has five toes ; the two inner ones of the fore-feet are remarkably short, and are equipped with blunt nails ; the remaining toes on the front feet are long, black, slightly curved, and sharply pointed : the hair of the tail is thickly inserted on the sides only, which gives it a flat appearance, and a long oval form : the tips of the hair form,

ing the outer edges of the tail are white, the other extremity of a fox red: the under part of the tail resembles an iron gray; the upper is of a reddish brown: the lower part of the jaws, the under part of the neck, legs, and feet, from the body and belly downwards, are of a light brick red: the nose and eyes are of a darker shade, of the same colour: the upper part of the head, neck, and body, are of a curious brown gray, with a slight tinge of brick red: the longer hairs of these parts are of a reddish white colour, at their extremities, and falling together, give this animal a speckled appearance. These animals form in large companies, like those on the Missouri, occupying with their burrows sometimes two hundred acres of land: the burrows are separate, and each possesses, perhaps, ten or twelve of these inhabitants. There is a little mound in front of the hole, formed of the earth thrown out of the burrow, and frequently there are three or four distinct holes, forming one burrow, with these entrances around the base of these little mounds. These mounds, sometimes about two feet in height and four in diameter, are occupied as watch-towers by the inhabitants of these little communities. The squirrels, one or more, are irregularly distributed on the tract they thus occupy, at the distance of ten, twenty, or sometimes from thirty to forty yards. When any one approaches, they make a shrill whistling sound, somewhat resembling tweet, tweet, tweet, the signal for their party to take the alarm, and to retire into their intrenchments. They feed on the roots of grass, &c.

The small brown squirrel is a beautiful little animal, about the size and form of the red squirrel of the eastern Atlantic states and western lakes. The tail is as long as the body and neck, and formed like that of the red squirrel: the eyes are black, the whiskers long and black but not abundant: the back, sides, head, neck, and outer part of the legs are of a reddish brown: the throat, breast, belly, and inner part of the legs are of a pale red: the tail is a mixture of black and fox-coloured red, in which the black predominates in the middle, and the other on the edges and extremity. the hair of the body is about half an inch long, and so fine and soft it has the appearance of fur: the hair of the tail is coarser and double in length. This animal subsists chiefly on the seeds of various species of pine, and is always found in the pine country.

The ground squirrel is found in every part of this country, as well in the prairies as in the woodlands, and is one of the few animals which we have seen in every part of our journey, and differs in no respect from those of the United States.

There is still another species, denominated by captain Lewis, the barking squirrel, found in the plains of the Missouri. This animal commonly weighs

three pounds : the colour is a uniform bright brick red and grey, and the former predominates : the under side of the neck and belly are lighter than the other parts of the body : the legs are short, and the breast and shoulders wide : the head is stout and muscular, and terminates more bluntly, wider, and flatter than that of the common squirrel : the ears are short, and have the appearance of amputation : the jaw is furnished with a pouch to contain his food, but not so large as that of the common squirrel : the nose is armed with whiskers on each side, and a few long hairs are inserted on each jaw, and directly over the eyes : the eye is small and black : each foot has five toes, and the two outer ones are much shorter than those in the centre. *The two inner toes of the fore-feet are long, sharp, and well adapted to digging and scratching.* From the extremity of the nose to the end of the tail this animal measures one foot and five inches, of which the tail occupies four inches. Notwithstanding the clumsiness of his form, he is remarkably active, and he burrows in the ground with great rapidity. These animals burrow and reside in their little subterraneous villages like the burrowing squirrel. To these apartments, although six or eight usually associate together, there is but one entrance. They are of great depth, and captain Lewis once pursued one to the depth of ten feet, and did not reach the end of the borrow. They occupy, in this manner, several hundred acres of ground, and when at rest their position is generally erect on their hinder feet and rump : they sit with much confidence, and bark at the intruder as he approaches, with a fretful and harmless intrepidity. The note resembles that of the little toy-dog : the yelps are in quick and angry succession, attended by rapid and convulsive motions, as if they were determined to sally forth in defence of their freehold. They feed on the grass of their village, the limits of which they never venture to exceed. As soon as the frost commences, they shut themselves up in their caverns, and continue until the spring opens. The flesh of this animal is not unpleasant to the taste.

17. Sewellel is a name given by the natives to a small animal found in the timbered country on this coast. It is more abundant in the neighbourhood of the great Falls and rapids of the Columbia, than on the coast which we inhabit.

The natives make great use of the skins of this animal in forming their robes, which they dress with the fur on, and attach them together with sinews of the elk or deer : the skin, when dressed, is from fourteen to eighteen inches long and from seven to nine in width ; the tail is always separated from the skin by the natives when making their robes. This animal mounts a tree and burrows in the ground precisely like a squirrel : the ears are short, thin, and pointed, and covered with a fine, short hair, of a uniform reddish brown : the bottom, or the

base of the long hairs, which exceed the fur but little in length, as well as the fur itself, are of a dark colour next to the skin for two-thirds of the length of this animal: the fur and hair are very fine, short, thickly set, and silky: the ends of the fur, and tip of the hair, are of a reddish brown, and that colour predominates in the usual appearance of the animal. Captain Lewis offered considerable rewards to the Indians, but was never able to procure one of these animals alive.

18. The *braro*, so called from the French engagees, appears to be an animal of the civet species, and much resembles the common badger. These animals inhabit the open plains of the Columbia, sometimes those of the Missouri, and are sometimes found in the woods; they burrow in hard grounds with surprising ease and dexterity, and will cover themselves in a very few moments: they have five long fixed nails on each foot; those on the fore-feet are much the longest, and one of those on each hind foot is double, like that of the beaver: they weigh from fourteen to eighteen pounds: the body is long in proportion to its thickness: the fore legs are remarkably large, muscular, and are formed like those of the turnspit dog, and, as well as the hind legs, are short: these animals are broad across the shoulders and breast: the neck is short, the mouth wide, and furnished with sharp straight teeth, both above and below, with four sharp, straight, pointed tusks, two in the upper, and two in the lower jaw: the eyes are black and small; whiskers are placed in four points on each side near the nose, and on the jaws near the opening of the mouth: the ears are short, wide, and oppressed, as if a part had been amputated: the tail is four inches in length, the hair of which is longest at the point of the junction with the body, and growing shorter until it ends in an acute point: the hairs of the body are much shorter on the sides and rump than those on any other part, which gives the body an apparent flatness, particularly when the animal rests upon his belly: the hair is upwards of three inches in length, especially on the rump, where it extends so far towards the point of the tail, it conceals the shape of that part, and gives to the whole of the hinder parts of the body the appearance of a right-angled triangle, of which the point of the tail forms an acute angle: the small quantity of coarse fur intermixed with the hair is of a reddish pale yellow.

19. The rats which inhabit the Rocky mountains, like those on the borders of the Missouri, in the neighbourhood of the mountains, have the distinguishing traits of possessing a tail covered with hair like the other parts of the body. These animals are probably of the same species with those of the Atlantic states, which have not this characteristic distinction: the ordinary house rat we found on the banks of the Missouri, as far up as the woody country extends, and the