CHAPTER VII.

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 pashcco 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 toward 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 caten: 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, af-
ter 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 greatest abundance. From each root a single
stem rises erectly to the height of three or four feet, some-
what thicker than a large quill, hollow and jointed; about
twenty or thirty long, línical, stellate, or radiate and hori-
izontal 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 ap-
pearance, 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, de-
scending perpendicularly to the root, while just above the
junction of the radicle with the stem, the latter is surround-
ed in the form of a wheel, with six or nine small radicles,
descending obliquely: the root attached to this radicle is a
perennial solid bulb, about an inch long, and of the thick-
ness 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 Statss. 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 In-
dians. 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 sagittafolia, or common arrowhead. 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 seacoast.

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 sim-
ple, 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 seal-berry. 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 at-
tached 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
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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 their 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 the 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 part of the 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 cane 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, accrous, 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 longitudinally 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 overflown 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 acuminated: 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, spongy, 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
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proceed from the sides of the bough, as well as from its extremities. It was no where seen above the Wappatoo. 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 devested 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 incissures: 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 incissures 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-holley, a green brier, 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 seacoast, 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 sextile, 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 form 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 incisions: 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 poligynia: the flowers are single: the peduncle long and cylindric: the calyx is a perianth, of one leaf, five cleft, and acutely pointed: the pe-
rianth 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 pistillum: the anther is two lobed and influted, situated on the top of the filament of the pistillum: 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 sharped 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 nutritious 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 peltate 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 successively pinnate, as are all those of the large fern. Both of these species preserve 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 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 Choppunish, Sokulks, Escheloots, Eneshures, and Chilluckittequaws, all enjoy the benefit of that docile, noble, and generous animal; and all of them, except the three last, 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: notwithstanding, 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 Mutlomah 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 Columbia river, and the Pacific ocean.

2. The dog is unusually small, about the size of an ordinary cur: he is usually particoloured, 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 large wolf of the plains, the tyger-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. There are rarely found on the westerly 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 seacoast and the plains of the Missouri, and likewise the borders of the Koos-kooskee 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 lands 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 cars 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 northwest. 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 which 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 turn spit 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 black or white 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 persue 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 those 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 seacoast, 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 raccoon inhabits woody countries bordering on the coast, in considerable numbers, and are 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 tanners' 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
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it a flat appearance, and a long oval form: the tips of the hair forming 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 gray, 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 burrow. 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 native 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 rat which inhabits 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 rat, such as has been described, captain Lewis found in the state of Georgia, and also in Madison's cave in Virginia.

20. The mouse which inhabits this country are precisely the same with those which inhabit the United States.

21. The mole. This animal differs in no respect from the species so common in the United States.

22. The panther is found indifferently, either in the great plains of the Columbia, the western side of the Rocky mountains, or on the coast of the Pacific. He is the same animal so well known on the Atlantic coast, and most commonly found on the frontiers, or unsettled parts of our country. He is very seldom found, and when found, so wary, it is difficult to reach him with a musket.

23. The hare on this side of the Rocky mountains inhabits the great plains of the Columbia. On the eastward of those mountains they inhabit the plains of the Missouri. They weigh from seven to eleven pounds: the eye is large and prominent, the pupil of a deep sea-green, occupying one third of the diameter of the eye; the iris is of a bright yellowish and silver colour; the ears are placed far back, and very near each other, which the animal can, with surprising ease and quickness, dilate, and throw forward, or contract, and hold upon his back at pleasure: the head, neck, back, shoulders, thighs, and outer part of the legs and thighs are of a lead colour: the sides, as they approach the belly, become gradually more white: the belly, breast, and inner part of the legs and thighs are white, with a light shade of
lead colour: the tail is round and bluntly pointed, covered with white, soft, fine fur, not quite so long as on the other parts of the body: the body is covered with a deep, fine, soft, close fur. The colours here described are those which the animal assumes from the middle of April to the middle of November; the rest of the year he is of a pure white, except the black and reddish brown of the ears, which never change. A few reddish brown spots are sometimes intermixed with the white, at this season (February 26, 1806) on their heads and the upper part of their necks and shoulders: the body of the animal is smaller and longer in proportion to its height than the rabbit: when he runs he conveys his tail straight behind, in the direction of his body: he appears to run and bound with surprising agility and ease: he is extremely fleet, and never burrows or takes shelter in the ground when pursued. His teeth are like those of the rabbit, as is also his upper lip, which is divided as high as the nose. His food is grass, herbs, and in winter he feeds much on the bark of several aromatic herbs, growing on the plains. Captain Lewis measured the leaps of this animal, and found them commonly from eighteen to twenty-one feet: they are generally found separate, and are never seen o associate in greater numbers than two or three.

24. The rabbit is the same with those of our own country, and are found indifferently, either on the prairies or the woodlands, and are not very abundant.

25. The polecat is also found in every part of this country: they are very abundant on some parts of the Columbia, particularly in the neighbourhood of the Great falls and narrows of that river, where they live in the cliffs along the river, and feed on the offal of the Indian fishing shores. They are of the same species as those found in the other parts of North America.

The birds which we have seen between the Rocky mountains and the Pacific may be divided into two classes, the terrestrial and the aquatic. In the former class are to be arranged,
1. The grouse or prairie-hen. This is peculiarly the inhabitant of the great plains of the Columbia, and does not differ from those of the upper portion of the Missouri. The tail is pointed, the feathers in the center, and much longer than those on the sides. This species differs essentially in the formation of the plumage from those of the Illinois, which have their tales composed of feathers of an equal length. In the winter season this bird is bootied to the first joint of the toes; the toes are curiously bordered on their lower edges with narrow hard scales, which are placed very close to each other, and extend horizontally about one eighth of an inch on each side of the toes, adding much to the broadness of the feet, a security which bounteous nature has furnished them for passing over the snows with more ease, and what is very remarkable, in the summer season these scales drop from the feet. This bird has four toes on each foot, the colour is a mixture of dark brown, reddish and yellowish brown, with white confusedly mixed. In this assemblage of colours, the reddish brown prevails most on the upper parts of the body, wings, and tail, and the white underneath the belly, and the lower parts of the breast and tail. These birds associate in large flocks in autumn and winter, and even in summer are seen in companies of five or six. They feed on grass, insects, leaves of various shrubs in the plains, and on the seeds of several species of speth and wild rye, which grow in richer soils. In winter their food consists of the buds of the willow and cotton-wood, and native berries.

2. The cock of the plains is found on the plains of the Columbia in great abundance, from the entrance of the southeast fork of the Columbia to that of Clarke's river. It is about two and three quarter inches the size of our ordinary turkey: the beak is large, short, covered and convex, the upper exceeding the lower chop: the nostrils are large, and the back black; the colour is an uniform mixture of a dark brown, resembling the dove, and a reddish and yellowish
brown, with some small black specks. In this mixture the dark brown prevails, and has a slight cast of the dove-colour: the wider side of the large feathers of the wings are of a dark brown only. The tail is composed of nineteen feathers, and that inserted in the centre is the longest, the remaining nine on each side gradually diminish. The tail when folded comes to a very sharp point, and appears proportionally long, when compared with the other parts of the body. In the act of flying, the tail resembles that of the wild pigeon, although the motion of the wings is much like that of the pheasant and grouse. This bird has four toes on each foot, of which the hindmost is the shortest, and the leg is covered with feathers about half the distance between the knee and foot. When the wing is expanded there are wide openings between its feathers, the plumage being too narrow to fill up the vacancy: the wings are short in comparison with those of the grouse or pheasant. The habits of this bird resemble those of the grouse, excepting that his food is that of the leaf and buds of the pulpy-leafed thorn. Captain Lewis did not remember to have seen this bird but in the neighbourhood of that shrub, which they sometimes feed on, the prickly pear. The gizzard is large, and much less compressed and muscular than in most fowls, and perfectly resembles a maw. When this bird flies he utters a cackling sound, not unlike that of the dunghill fowl. The flesh of the cock of the plains is dark, and only tolerable in point of flavour, and is not so palatable either as that of the pheasant or grouse. The feathers about the head are pointed and stiff and short, fine and stiff about the ears; at the base of the beak several hairs are to be seen. This bird is invariably found in the plains.

3. The pheasant, of which we distinguish the large black and white pheasant, the small speckled pheasant, the small brown pheasant:

1. The large black and white pheasant differs but little from those of the United States; the brown is rather brighter, and has a more reddish tint. This bird has eighteen
feathers in the tail, of about six inches in length. He is also
booted to the toes: the two tufts of long black feathers on
each side of the neck, so common in the male of this spe-
cies inhabiting the United States, are no less observable in
this pheasant: the feathers on the body are of a dark brown,
tipped with white and black, in which mixture the black
predominates; the white are irregularly intermixed with
those of the black and dark brown in every part, but in
greater proportion about the neck, breast, and belly: this
mixture makes this bird resemble much that kind of dung-
hill fowl, which the housewives of our country call Dommi-
nicker. On the breast of some of these species the white
predominates: the tufts on the neck leave a space about
two and a half inches long, and one inch in width, where no
feathers grow, though concealed by the plumage connected
with the higher and under parts of the neck; this space en-
able to contract or dilate the feathers on the neck
with more ease: the eye is dark, the beak is black, curved,
somewhat pointed, and the upper exceeds the under chop:
a narrow vermillion stripe runs above each eye, not protu-
berant but uneven, with a number of minute rounded dots.
The bird feeds on wild fruits, particularly the berry of the
sacacommis, and exclusively resides in that portion of the
Rocky mountains watered by the Columbia.

2. The small speckled pheasant resides in the same coun-
try with the foregoing, and differs only in size and colour.
He is half the size of the black and white pheasant, asso-
ciates in much larger flocks, and is very gentle: the black
is more predominant, and the dark brown feathers less fre-
quent in this than in the larger species: the mixture of white
is more general on every part. This bird is smaller than
our pheasant, and the body more round: the flesh of both
this species is dark, and with our means of cooking, not well
flavoured.

3. The small brown pheasant is an inhabitant of the same
country, and is of the same size and shape of the speckled
pheasant, which he likewise resembles in his habits. The stripe above the eye in this species is scarcely perceptible, and is, when closely examined, of a yellow or orange colour, instead of the vermillion of the other species: the colour is a uniform mixture of dark yellowish brown, with a slight aspersion of brownish white on the breast, belly, and feathers underneath the tail: the whole appearance has much the resemblance of the common quail: this bird is also booted to the toes: the flesh of this is preferable to the other two.

4. The buzzard is, we believe, the largest bird of North America. One which was taken by our hunters was not in good condition, and yet the weight was twenty-five pounds. Between the extremity of the wings the bird measured nine feet and two inches: from the extremity of the beak to the toe, three feet nine and a half inches; from the hip to the toe, two feet; the circumference of the head was nine and three quarter inches: that of the neck seven and a half inches; that of the body inclusive of two feet three inches: the diameter of the eye is four and a half tenths of an inch; the iris is of a pale scarlet red, and the pupil of a deep sea-green: the head and part of the neck are uncovered by feathers: the tail is composed of twelve feathers of equal length, each of the length of fourteen inches: the legs are uncovered and not entirely smooth: the toes are four in number, three forward, and that in the centre much the largest; the fourth is short, inserted near the inner of the three other toes, and rather projecting forward: the thigh is covered with feathers as low as the knee, the top or upper part of the toes are imbricated with broad scales, lying transversely: the nails are black, short, and bluntly pointed: the underside of the wing is covered with white down and feathers: a white stripe of about two inches in width marks the outer part of the wing, embracing the lower points of the plumage, covering the joints of the wing: the remainder is of a deep black: the skin of the beak and head to the joining
of the neck, is of a pale orange colour; the other part, destitute of plumage, is of a light flesh colour. It is not known that this bird preys upon living animals: we have seen him feeding on the remains of the whale and other fish thrown upon the coast by the violence of the waves. This bird was not seen by any of the party until we had descended Columbia river, below the great falls, and he is believed to be of the vulture genus, although the bird lacks some of the characteristics, particularly the hair on the neck, and the plumage on the legs.

5. The robin is an inhabitant of the Rocky mountains: the beak is smooth, black, and convex; the upper chop exceeds the other in length, and a few small black hairs garnish the sides of its base: the eye is of a uniform deep sea-green colour: the legs, feet, and talons are white, of which the front one is of the same length of the leg, including the talon; these are slightly imbricated, curved, and sharply pointed: the crown, from the beak back to the neck, embracing more than half the circumference of the neck, the back, and tail, are all of a bluish dark brown: the two outer feathers of the tail are dashed with white near their tips, imperceptible when the tail is folded: a fine black forms the ground of their wings; two stripes of the same colour pass on either side of the head, from the base of the beak to the junction, and embrace the eye to its upper edge: a third stripe of the same colour passes from the sides of the neck to the tips of the wings, across the croop, in the form of a gorget: the throat, neck, breast, and belly, are of a fine brick red, tinged with yellow; a narrow stripe of this colour commences just above the centre of each eye, and extends backwards to the neck till it comes in contact with the black stripe before mentioned, to which it seems to answer as a border: the feathers forming the first and second ranges of the coverts of the two joints of the wing next to the body, are beautifully tipped with this brick red, as is also each large feather of the wing, on the short side of its plumage.
This beautiful little bird feeds on berries. The robin is an inhabitant exclusively of the woody country; we have never heard its note, which the coldness of the season may perhaps account for.

The leather-winged bat, so common to the United States, likewise inhabits this side of the Rocky mountains.

6. The crow and raven is exactly the same in appearance and note as that on the Atlantic, except that it is much smaller on the Columbia.

7. The hawks too of this coast do not differ from those of the United States. We here see the large brown hawk, the small or sparrow hawk, and one of an intermediate size, called in the United States, the hen hawk, which has a long tail and blue wings, and is extremely fierce, and rapid in its flight. The hawks, crows, and ravens are common to every part of this country, their nests being scattered in the high cliffs, along the whole course of the Columbia and its southeastern branches.

8. The large blackbird is the same with those of our country, and are found every where in this country.

9. The large hooting owl we saw only on the Kooskooskee under the Rocky mountains. It is the same in form and size with the owl of the United States, though its colours, particularly the reddish brown, seem deeper and brighter.

10. The turtle-dove and the robin (except the Columbian robin already described) are the same as those of the United States, and are found in the plains as well as in the common broken country.

11. The magpie is most commonly found in the open country, and resemble those of the Missouri, already described.

12. The large woodpecker or laycock, the lark woodpecker, and the common small white woodpecker, with a red head, are the inhabitants exclusively of the timbered lands, and differ in no respect from birds of the same species in the United States.
13. The lark, which is found in the plains only, and is not unlike what is called in Virginia, the old field lark, is the same with those already described as seen on the Missouri.

14. The flycatcher is of two species.
   The first is of a small body, of a reddish brown colour: the tail and neck short, and the beak pointed: some fine black specks are intermingled with the reddish brown. This is of the same species with that which remains all winter in Virginia, where it is sometimes called the wren.
   The second species has recently returned, and emigrates during the winter. The colours of this bird are, a yellowish brown, on the back, head, neck, wing and tail; the breast and belly are of a yellowish white; the tail is in the same proportion as that of the wren, but the bird itself is of a size smaller than the wren: the beak is straight, pointed, convex, rather large at the base, and the chops are of equal length. The first species is smaller, and in fact the smallest bird which captain Lewis had ever seen excepting the humming bird. Both of this species are found exclusively in the woody country.

15. Corvus. The blue-crested, and the small white-breasted corvus, are both natives of the piny country, and are invariably found as well on the Rocky mountains as on this coast. They have already been described.

16. The snipe, &c. The common snipe of the marshes, and the common sand snipe, are of the same species as those so well known in the United States. They are by no means found in such abundance here as they are on the coast of the Atlantic.

17. The leathern winged bat, so familiar to the natives of the United States, is likewise found on this side of the Rocky mountains.

18. The white woodpecker, likewise frequents these regions, and reminds our party of their native country, by his approaches. The head of this bird is of a deep red colour,
like that of the United States. We have conjectured that he has lately returned, as he does not abide in this country during the winter. The large woodpecker, and the lark woodpecker, are found in this country, and resemble those of the United States.

19. The black woodpecker is found in most parts of the Rocky mountains, as well as in the western and southwestern mountains. He is about the size of the lark woodpecker, or turtle-dove, although his wings are longer than the wings of either of these birds: the beak is one inch in length, black, curved at the base, and sharply pointed: the chops are the same in length; around the base of the beak, including the eye and a small part of the throat, there is a fine crimson red: the neck, as low down as the crook in front, is of an iron gray: the belly and breast present a curious mixture of white and blood-red, which has much the appearance of paint, where the red predominates: the top of the head, back, sides, and upper surface of the wings and tail, exhibit the appearance of a glossy green, in a certain exposure to the light: the under side of the wings and tail, is of a sooty black: the tail is equipped with ten feathers, sharply pointed, and those in the centre the longest, being about two and a half inches in length: the tongue is barbed and pointed, and of an elastic and cartilagenous substance: the eye is rather large, the pupil black, and the iris of a dark and yellowish brown: the bird in its actions when flying, resembles the small red-headed woodpecker common to the United States, and likewise in its notes: the pointed tail renders essential service when the bird is sitting and retaining his resting position against the perpendicular sides of a tree: the legs and feet are black, and covered with wide imbricated scales: he has four toes on each foot, two in the rear and two in front, the nails of which are much curved and pointed remarkably sharp: he feeds on bugs and a variety of insects.
20. The calamut eagle, sometimes inhabits this side of the Rocky mountains. This information captain Lewis derived from the natives, in whose possession he had seen their plumage. These are of the same species with those of the Missouri, and are the most beautiful of all the family of eagles in America. The colours are black and white, and beautifully variegated. The tail feathers, so highly prized by the natives, are composed of twelve broad feathers of unequal length, which are white, except within two inches of their extremities, where they immediately change to a jetty black: the wings have each a large circular white spot in the middle, which is only visible when they are extended: the body is variously marked with black and white: in form they resemble the bald eagle, but they are rather smaller, and fly with much more rapidity. This bird is feared by all his carniverous competitors, who, on his approach, leave the carcase instantly, on which they had been feeding. The female breeds in the most inaccessible parts of the mountains, where she makes her summer residence, and descends to the plains only in the fall and winter seasons. The natives are at this season on the watch, and so highly is this plumage prized by the Mandans, the Minnetarees, and the Ricaras, that the tail feathers of two of these eagles will be purchased by the exchange of a good horse or gun, and such accoutrements. Amongst the great and little Osages, and those nations inhabiting the countries where the bird is more rarely seen, the price is even double of that above mentioned. With these feathers the natives decorate the stems of their sacred pipes or calumets, from whence the name of the calamet eagle is derived. The Ricaras have domesticated this bird in many instances, for the purpose of obtaining its plumage. The natives, on every part of the continent, who can procure the feathers, attach them to their own hair, and the manes and tails of their favourite horses, by way of ornament. They also decorate their war caps or bonnets with these feathers.
As to the aquatic birds of this country, we have to repeat
the remark, that, as we remained near the coast during the
winter only, many birds, common both in the summer and
autumn, might have retired from the cold, and been lost to
our observation. We saw, however,

The large blue, and brown herron; the fishing hawk; the
blue-crested fisher; several species of gulls; the cormorant;
two species of loons; brant of two kinds; geese; swan; and se-
veral species of ducks.

1. The large blue and brown herrons, or cranes, as they
are usually termed in the United States, are found on the
Columbia below tide-water. They differ in no respect from
the same species of bird in the United States. The same
may be observed of

2. The fishing hawk, with the crown of the head white,
and the back of a mealy white, and

3. Of the blue-crested or king-fisher, both of which are
found everywhere on the Columbia and its tributary wa-
ters; though the fishing hawk is not abundant, particularly
in the mountains.

4. Of gulls, we have remarked four species on the coast
and the river, all common to the United States.

5. The cormorant is, properly speaking, a large black
duck that feeds on fish. Captain Lewis could perceive no
difference between this bird and those ducks which inhabit
the Potomack and other rivers on the Atlantic coast. He
never remembered to have seen those inhabiting the Atlant-
tic states, so high up the river as they have been found in
this quarter. We first discovered the corvus on the Koos-
kooskee, at the entrance of Chopushin river; they increased
in numbers as we descended, and formed much the greatest
portion of the water-fowl which we saw until we reached
the Columbia at the entrance of the tides. They abound
even here, but bear no proportion to the number of other
water-fowl seen at this place.

6. The loon: there are two species of loons: the spec-
kled loon, found on every part of the rivers of this country.
They are of the same size, colour and form, with those of the Atlantic coast.

The second species we found at the falls of Columbia, and from thence downwards to the ocean. This bird is not more than half the size of the speckled loon; the neck is, in front, long slender and white: the plumage on the body and back of the head and neck are of a dun or ash colour: the breast and belly are white, the beak like that of the speckled loon; and like them, it cannot fly, but flutters along on the surface of the water, or dives for security when pursued.

7. The brant are of three kinds; the white, the brown, and the pied. The white brant are very common on the shores of the Pacific, particularly below the water, where they remain in vast numbers during the winter: they feed like the swan-geese, on the grass, roots, and seeds which grow in the marshes: this bird is about the size of the brown brant, or a third less than the common Canadian wild goose: the head is rather larger, the beak thicker than that of the wild goose, shorter, and of much the same form, being of a yellowish white colour, except the edges of the chops, which are frequently of a dark brown: the legs and feet are of the same form of the goose, and are of a pale flesh colour: the tail is composed of sixteen feathers of equal length as those of the geese and brown brant are, and bears about the same proportion in point of length: the eye is of a dark colour, and nothing remarkable in size: the wings are larger when compared with those of the geese, but not so much so as in the brown brant: the colour of the plumage is a pure uniform white, except the large feathers at the extremity of the wings, which are black: the large feathers at the first joint of the wing next to the body are white: the note of this bird differs essentially from that of the goose; it more resembles that of the brown brant, but is somewhat different; it is like the note of a young domestic goose, that has not perfectly attained its full sound: the flesh of this bird is exceedingly fine, preferable to either the goose or brown brant.
2. The brown brant are much of the same colour, form, and size as the white, only that their wings are considerably longer and more pointed: the plumage of the upper part of the body, neck, head, and tail, are much the colour of the Canadian goose, but somewhat darker, in consequence of some dark feathers irregularly scattered throughout: they have not the same white on the neck and sides of the head as the goose, nor is the neck darker than the body: like the goose, they have some white feathers on the rump at the joining of the tail: the beak is dark, and the legs and feet also dark with a greenish cast: the breast and belly are of a lighter colour than the back, and is also irregularly intermixed with dark brown and black feathers, which give it a pied appearance: the flesh is darker and better than that of the goose: the habits of these birds resemble those of the geese, with this difference, that they do not remain in this climate in such numbers during the winter as the others, and that they set out earlier in the fall season on their return to the south, and arrive later in the spring than the goose. There is no difference between this bird and that called simply the brant, so common on the lakes, on the Ohio and Mississippi. The small goose of this country is rather less than the brant; its head and neck like the brant.

3. The pied brant weigh about eight and a half pounds, differing from the ordinary pied brant in their wings, which are neither so long nor so pointed: the base of the beak is for a little distance white, suddenly succeeded by a narrow line of dark brown: the remainder of the neck, head, back, wings and tail, all except the tips of the feathers, are of a bluish brown of the common wild goose: the breast and belly are white, with an irregular mixture of black feathers, which give those parts a pied appearance. From the legs back underneath the tail and around its junction with the body above, the feathers are white: the tail is composed of eighteen feathers, the longest in the centre, and measures
six inches with the barrel of the quill: those on the sides of the tail are something shorter, and bend with the extremities inwards towards the centre of the tail: the extremities of these feathers are white: the beak is of a light flesh colour: the legs and feet, which do not differ in structure from those of the goose or brant of other species, are of an orange colour: the eye is small, the iris of a dark yellowish brown, and pupil black: the note is much that of the common pied brant, from which in fact, they are not to be distinguished at a distance, although they certainly are of a distinct species: the flesh is equally palatable with that of common pied brant. They do not remain here during the winter in such numbers as the bird above mentioned: this bird is here denominated the pied brant, on account of the near resemblance, and for want of another appellation.

8. The geese are either the large or small kind: the large goose resembles our ordinary wild or Canadian goose; the small is rather less than the brant, which it resembles in the head and neck, where it is larger in proportion than that of the goose: the beak is thicker and shorter; the note like that of a tame goose. In all other points it resembles the large goose, with which it associates so frequently, that it was some time before it was discovered to be of a distinct species.

9. The swan are of two kinds, the large and the small: the large swan is the same common to the Atlantic states: the small differs only from the large in size and in note: it is about one fourth less, and its note is entirely different. It cannot be justly imitated by the sound of letters; it begins with a kind of whistling sound, and terminates in a round full note, louder at the end: this note is as loud as that of the large species; whence it might be denominated the whistling swan: its habits, colour, and contour, appears to be precisely those of the larger species: these birds were first found below the great narrows of the Columbia near the Chilluckittequaw nation: they are very abundant in this neighbourhood, and remained with the party all winter, and
in number they exceed those of the larger species in the pro-
portion of five to one.

10. Of ducks, we enumerate many kinds: the duckin-
mallard; the canvass-back duck; the red-headed fishing duck,
the black and white duck; the little brown duck; black duck;
two species of divers, and blue-winged teal.

1. The duckinmallard, or common large duck, resembles
the domestic duck, are very abundant, and found in every
part of the river below the mountains: they remain here all
winter, but during this season do not continue much above
tide-water.

2. The canvass-back duck is a most beautiful fowl, and most
delicious to the palate: it is found in considerable numbers
in this neighbourhood. It is of the same species with those
of the Delaware, Susquehannah and Potomack, where it is
called the canvass-back duck, and in James' river it is known
by the name of the shelled drake. From this last mentioned
river, it is said, however, that they have almost totally dis-
appeared. To the epicure of those parts of the United
States, where this game is in plenty, nothing need be said in
praise of its exquisite flavour, and those on the banks of the
Columbia are equally delicious. We saw nothing of them
until after we had reached the marshy islands.

3. The-red headed fishing duck is common to every part of
the river, and was likewise found in the Rocky mountains,
and was the only duck discovered in the waters of the Co-
lumbia within those mountains. They feed chiefly on craw-
fish, and are the same in every respect as those on the ri-
ders and the mountains bordering on the Atlantic ocean.

4. The black and white duck is small, and a size larger
than the teal. The male is beautifully variegated with
black and white: the white occupies the side of the head,
breast and back, the tail, feathers of the wings, and two
tufts of feathers which cover the upper part of the wings,
when folded, and likewise the neck and head: the female is
darker. This is believed to be the same species of duck
common to the Atlantic coast, and called the butter-box: the beak is wide and short, and, as well as the legs, of a dark colour, and the flesh extremely well flavoured. In form it resembles the duckinmallard, although not more than half the size of that bird. It generally resorts to the grassy marshes, and feeds on grass seeds, as well as roots.

5. The black duck is about the size of the blue-winged teal; the colour of a dusky black; the breast and belly somewhat lighter, and of a dusky brown: the legs stand longitudinally with the body, and the bird when on shore, stands very erect: the legs and feet are of a dark brown: it has four toes on each foot, and a short one at the heel: the long toes are in front, unconnected with the web: the webs are attached to each side of the several joints of the toe, and divided by several sinews at each joint, the web assuming in the intermediate part an eliptical form: the beak is about two inches long, straight, fluted on the sides, and tapering to a sharp point: the upper chop is the longest, and bears on its base, at its junction with the head, a little conic protuberance of a cartilagenous substance, being of a reddish brown at the point: the beak is of an ivory colour; the eye dark. These ducks usually associate in large flocks, are very noisy, and have a sharp shrill whistle: they are fat and agreeably flavoured; feed principally on moss and vegetable productions of the water: they are not exclusively confined to the water at all seasons, captain Lewis has noticed them on many parts of the rivers Ohio and Mississippi.

6. The divers are the same with those of the United States. The smaller species have some white feathers about the rump, with no perceptible tail, and are very acute and quick in their motion: the body is of a reddish brown; the beak sharp, and somewhat curved, like that of the pheasant: the toes are not connected, but webbed, like those of the black duck. The larger species are about the size of the teal, and can fly a short distance, which the smaller but seldom attempt: they have a short tail; their colour is also a uniform
brick reddish brown: the beak is straight and pointed: the feet are of the same form with the other species: the legs remarkably thin and flat, one edge being in front. The food of both species is fish and flesh: their flesh is unfit for use.

7. The blue-winged teal is an excellent duck, and in all respects the same as those of the United States. One of our hunters killed a duck which appeared to be a male. It was of a size less than the duck in mallard; the head, the neck as low as the croup, the back, tail, and covert of the wings were all of a deep fine black, with a slight mixture of purple about the head and neck: the belly and breast are white: some long feathers which lie underneath the wings, and cover the thighs, were of a pale dove colour, with fine black specks: the large feathers of the wings are of a dove colour: the legs are dark; the feet are composed of four toes, of which three are in front connected by a web: the fourth is short and flat, and placed high on the heel behind the leg: the tail is composed of fourteen short pointed feathers: the beak of this duck is remarkably wide, and two inches in length: the upper chop exceeds the under one, both in length and width, insomuch, that when the beak is closed, the under chop is entirely concealed by the upper: the tongue indentation on the margin of the chops, are like those of the mallard: the nostrils are large, longitudinal, and connected: a narrow strip of white garnishes the base of the upper chop: this is succeeded by a pale sky-blue colour, occupying about an inch; which again is succeeded by a transverse stripe of white, and the extremity is a fine black: the eye is moderately large, the pupil black, and of a fine orange colour: the feathers on the crown of the head are longer than those on the upper part of the neck and other parts of the head, which give it the appearance of being crested.

The fish, which we have had an opportunity of seeing, are, the whale, porpoise, skait, flounder, salmon, red char, two species of salmon trout, mountain, or speckled trout, bottlenose, anchovy, and sturgeon.
1. The whale is sometimes pursued, harpooned and taken by the Indians, although it is much more frequently killed by running foul of the rocks in violent storms, and thrown on shore by the action of the wind and tide. In either case, the Indians preserve and eat the blubber and oil; the bone they carefully extract and expose to sale.

2. The porpoise is common on this coast, and as far up the river as the water is brackish. The Indians sometimes gig them, and always eat their flesh when they can procure it.

3. The skait is also common in the salt water: we saw several of them which had perished, and were thrown on shore by the tide.

4. The flounder is also well known here, and we have often seen them left on the beach after the departure of the tide. The Indians eat this fish, and think it very fine. These several species of fish are the same with those on the Atlantic coast.

5. The common salmon and red char are the inhabitants of both the sea and rivers; the former are usually the largest, and weigh from five to fifteen pounds: they extend themselves into all the rivers and little creeks on this side of the continent, and to them the natives are much indebted for their subsistence: the body of the fish is from two and an half to three feet long, and proportionally broad: it is covered with imbricated scales, of a moderate size, and gills: the eye is large, and the iris of a silvery colour: the pupil is black, the rostrum or nose extends beyond the under jaw, and both jaws are armed with a single series of long teeth, which are subulate and inflected near the extremities of the jaws, where they are also more closely arranged: they have some sharp teeth of smaller size, and some sharp points placed on the tongue, which is thick and fleshy: the fins of the back are two; the first is placed nearer the head than the ventral fins, and has several rays: the second is placed far back, near the tail, and has no rays. The flesh of this
fish is, when in order, of a deep flesh-coloured red, and every shade from that to an orange yellow: when very meagre it is almost white: the roes of this fish are in high estimation among the natives, who dry them in the sun, and preserve them for a great length of time; they are of the size of a small pea, nearly transparent, and of a reddish yellow cast; they resemble very much, at a little distance, our common garden currants, but are more yellow. Both the fins and belly of this fish are sometimes red, particularly the male: the red char are rather broader, in proportion to their length, than the common salmon: the scales are also imbricated, but rather larger; the rostrum exceeds the under jaw more, and the teeth are neither so large or so numerous as those of the salmon: some of them are almost entirely red on the belly and sides; others are much more white than the salmon, and none of them are variegated with the dark spots which mark the body of the other: their flesh, roes, and every other particular, with regard to the form, is that of the salmon.

6. Of the salmon trout, we observe two species, differing only in colour; they are seldom more than two feet in length, and narrow in proportion to their length, much more so than the salmon or red char. The jaws are nearly of the same length, and are furnished with a single series of small subulate straight teeth, not so long nor as large as those of the salmon. The mouth is wide, and the tongue is also furnished with some teeth: the fins are placed much like those of the salmon. At the great falls we found this fish of a silvery white colour on the belly and sides, and a bluish light brown on the back and head; the second species is of a dark colour on its back, and its sides and belly are yellow, with transverse stripes of dark brown; sometimes a little red is intermixed with these colours on the belly and sides towards the head. The eye, flesh, and roe, are like those described of the salmon: the white species found below the falls, were in excellent order, when the salmon were entirely out of season and
not fit for use. They associate with the red char, in little rivulets and creeks: the Indians say that the salmon begin to run early in May. The white salmon trout is about two feet and eight inches long, and weighs ten pounds: the eye is moderately large, the pupil black, with a small admixture of yellow, and iris of a silvery white, and a little turbid near its border with a yellowish brown. The fins are small in proportion to the fish; are bony but not pointed, except the tail and back fins, which are pointed a little: the prime back fin and ventral ones contain each ten rays, those of the gills thirteen, that of the tail twelve, and the small fin placed near and above the tail has no bony rays, but is a tough flexible substance, covered with smooth skin. It is thicker in proportion to its width than the salmon: the tongue is thick and firm, beset on each border with small subulate teeth, in a single series: the teeth and the mouth are as before described. Neither this fish nor the salmon are caught with the hook, nor do we know on what they feed.

7. The mountain or speckled trout are found in the waters of the Columbia within the mountains: they are the same with those found in the upper part of the Missouri, but are not so abundant in the Columbia as on that river. We never saw this fish below the mountains, but from the transparency and coldness of the Kooskooskee, we should not doubt of its existence in that stream as low as its junction with the southeast branch of the Columbia.

8. The bottlenose is the same with that before mentioned on the Missouri, and is found exclusively within the mountains.

Of shell fish we observe the clam, periwinkle, common muscle, the cockle, and a species with a circular flat shell. The clam of this coast are very small; the shell consists of two valves, which open with hinges: the shell is smooth, thin, of an oval form like that of the common muscle, and of sky-blue colour. It is about one and a half inches in length and hangs in clusters to the moss of the rocks: the natives
sometimes eat them. The periwinkle both of the river and the ocean; are similar to those found in the same situation on the Atlantic coast. The common muscle of the river are also the same with those on the rivers of the Atlantic coast: the cockle is small, and resembles much that of the Atlantic: there is also an animal that inhabits a shell perfectly circular, about three inches in diameter, thin and entire on the margin, convex and smooth on the upper side, plain on the under part, and covered with a number of minute capillary fibres, by means of which it attaches itself to the sides of the rocks: the shell is thin, and consists of one valve; a small circular aperture is formed in the centre of the under shell: the animal is soft and boneless.

The pellucid substance and fuci. The pellucid jelly-like substance, called the sea-nettle, is found in great abundance along the strand, where it has been thrown up by the waves and tide: there are two species of the fuci thrown up in that manner: the first species at one extremity consists of a large vesicle or hollow vessel, which will contain from one to two gallons: it is of a conic form, the base of which forms the extreme end, and is convex and globular, bearing at its centre some short, broad, and angular fibres: the substance is about the consistence of the rind of a citron melon, and three-fourths of an inch thick: the rind is smooth from the small extremity of the cone; a long hollow cylindric and regular tapering tube extends to twenty or thirty feet, and is then terminated with a number of branches, which are flat, half an inch in width, rough, particularly on the edges, where they are furnished with a number of little ovate vesicles or bags of the size of a pigeon's egg: this plant seems to be calculated to float at each extremity, while the little end of the tube, from whence the branches proceed, lie deepest in the water: the other species seen on the coast towards the Killamucks, resembles a large pumpkin; it is solid, and its specific gravity is greater than the water, though sometimes thrown out by the waves: it is of
a yellowish brown colour; the rind smooth, and its consistency is harder than that of the pumpkin; but easily cut with a knife: there are some dark brown fibres, rather harder than any other part, which pass longitudinally through the pulp or fleshy substance which forms the interior of this marine production.

The reptiles of this country are the rattlesnake, the gartersnake, lizard, and snail.

The gartersnake appears to belong to the same family with the common gartersnakes of the Atlantic coast, and like that snake they inherit no poisonous qualities: they have one hundred and sixty scuta on the abdomen, and seventy on the tail: those on the abdomen near the head and jaws as high as the eye, are of a bluish white, which, as it recedes from the head, becomes of a dark brown: the field of the back and sides black: a narrow stripe of a light yellow runs along the centre of the back; on each side of this stripe there is a range of small transverse, oblong spots, of a pale brick red, diminishing as they recede from the head, and disappear at the commencement of the tail: the pupil of the eye is black, with a narrow ring of white bordering on its edge; the remainder of the iris is of a dark yellowish brown.

The horned lizard, called, and for what reason we never could learn, the prairie buffaloe, is a native of these plains, as well as those on the Missouri: they are of the same size, and much the same in appearance as the black lizard: the belly is however broader, the tail shorter, and the action much slower: the colour is generally brown intermixed with yellowish brown spots: the animal is covered with minute scales, interspersed with small horny points, like blunt prickes on the upper surface of the body: the belly and throat resemble those of the frog, and are of a light yellowish brown: the edge of the belly is likewise beset with small horny projections, imparting to those edges a serrate appearance: the eye is small and dark: above and behind the eyes there are several projections of that bone, and their ex-
tremities also being armed with a firm black substance, resemble the appearance of horns sprouting from the head: these animals are found in greatest numbers in the sandy open plains, and appear in the greatest abundance after a shower of rain: they are sometimes found basking in the sunshine, but conceal themselves in little holes of the earth, in much the greatest proportion of the time: this may account for their appearance in such numbers after the rain, as their holes may thus be rendered untenantable.

9. The anchovy, which the natives call olthen, is so delicate a fish that it soon becomes tainted, unless pickled or smoked: the natives run a small stick through the gills and hang it up to dry in the smoke of their lodges, or kindle small fires under it for the purpose of drying: it needs no previous preparation of gutting, and will be cured in twenty-four hours: the natives do not appear to be very scrupulous about eating them when a little foed.
CHAPTER VIII.

Difficulty of procuring means of subsistence for the party—they determine to resume their journey to the mountains—they leave in the hands of the Indians a written memorandum, importing their having penetrated to the Pacific, through the route of the Missouri and Columbia, and through the Rocky mountains—the party commence their return route—dexterity of the Cathlamah Indians in carving—description of the Coweliskee river—they experience much hospitality from the natives—an instance of the extreme voracity of the vulture—the party are visited by many strange Indians, all of whom are kind and hospitable—scarcity of game, and embarrassments of the party on that account—captain Clarke discovers a tribe not seen in the descent down the Columbia—singular adventure to obtain provisions from there—particular description of the Multomah village and river—description of mount Jefferson—some account by captain Clarke of the Neerchokio tribe, and of their architecture—their sufferings by the small-pox.

Many reasons had determined us to remain at fort Clatsop till the first of April. Besides the want of fuel in the Columbian plains, and the impracticability of passing the mountains before the beginning of June, we were anxious to see some of the foreign traders, from whom, by means of our ample letters of credit, we might have recruited our exhausted stores of merchandise. About the middle of March however, we become seriously alarmed for the want of food: the elk, our chief dependence, had at length deserted their usual haunts in our neighbourhood, and retreated to the mountains. We were too poor to purchase other food from the Indians, so that we were sometimes reduced, notwithstanding all the exertions of our hunters, to a single day's provision in advance. The men too, whom the constant rains and confinement had rendered unhealthy, might we hoped be benefitted by leaving the coast, and resuming the exercise of travelling. We therefore determined to leave fort Clatsop, ascend the river slowly, consume the month of
March in the woody country, where we hope to find subsistence, and in this way reach the plains about the first of April, before which time it will be impossible to attempt crossing them: for this purpose we began our preparations. During the winter we had been very industrious in dressing skins, so that we now had a sufficient quantity of clothing, besides between three and four hundred pair of moccasins. But the whole stock of goods on which we are to depend, either for the purchase of horses or of food, during the long tour of nearly four thousand miles, is so much diminished, that it might all be tied in two handkerchiefs. We have in fact nothing but six blue robes, one of scarlet, a coat and hat of the United States artillery uniform, five robes made of our large flag, and a few old clothes trimmed with riband. We therefore feel that our chief dependence must be on our guns, which fortunately for us are all in good order, as we had taken the precaution of bringing a number of extra locks, and one of our men proved to be an excellent artist in that way. The powder had been secured in leaden canisters, and though on many occasions they had been under water, it remained perfectly dry, and we now found ourselves in possession of one hundred and forty pounds of powder, and twice that quantity of lead, a stock quite sufficient for the route homewards.

After much trafficking, we at last succeeded in purchasing a canoe for a uniform coat and half a carrot of tobacco, and took a canoe from the Clatsops, as a reprisal for some elk which some of them had stolen from us in the winter. We were now ready to leave fort Clatsop, but the rain prevented us for several days from caulking the canoes, and we were forced to wait for calm weather, before we could attempt to pass point William. In the meantime we were visited by many of our neighbours, for the purpose of taking leave of us. The Clatsop Commowool has been the most kind and hospitable of all the Indians in this quarter: we therefore gave him a certificate of the kindness and at-
tention which we had received from him, and added a more substantial proof of our gratitude, the gift of all our houses and furniture. To the Chinnook chief Delashelwilt, we gave a certificate of the same kind: we also circulated among the natives several papers, one of which we also posted up in the fort, to the following effect:

"The object of this last, is, that through the medium of some civilized person, who may see the same, it may be made known to the world, that the party consisting of the persons whose names are hereunto annexed, and who were sent out by the government of the United States to explore the interior of the continent of North America, did penetrate the same by the way of the Missouri and Columbia rivers, to the discharge of the latter into the Pacific ocean, where they arrived on the 14th day of November 1805, and departed the 23d day of March, 1806, on their return to the United States, by the same route by which they had come out."*

On the back of some of these papers, we sketched

* By a singular casualty, this note fell into the possession of captain Hill, who, while on the coast of the Pacific, procured it from the natives. This note accompanied him on his voyage to Canton, from whence it arrived in the United States. The following is an extract of a letter, from a gentleman at Canton to his friend in Philadelphia:

*Extract of a letter from——- to——- in Philadelphia.*

CANTON, January, 1807.

I wrote you last by the Governor Strong, Cleveland, for Boston; the present is by the brig Lydia, Hill, of the same place.

Captain Hill, while on the coast, met some Indian natives near the mouth of the Columbia river, who delivered to him a paper, of which I enclose you a copy. It had been committed to their charge by captains Clarke and Lewis, who had penetrated to the Pacific ocean. The original is a rough draft with a pen of their outward route, and that which they intended returning by. Just below the junction of Madison's river, they found an immense fall of three hundred and sixty-two feet perpendicular.
the connexion of the upper branches of the Missouri and Columbia rivers, with our route, and the track which we intended to follow on our return. This memorandum was all that we deemed it necessary to make; for there seemed but little chance that any detailed report to our government, which we might leave in the hands of the savages, to be delivered to foreign traders, would ever reach the United States. To leave any of our men here, in hopes of their procuring a passage home in some transient vessel, would too much weaken our party, which we must necessarily divide during our route; besides that, we will most probably be there ourselves sooner than any trader, who, after spending the next summer here, might go on some circuitous voyage.

The rains and wind still confined us to the fort; but at last our provisions dwindled down to a single day’s stock, and it became absolutely necessary to remove: we therefore sent a few hunters ahead, and stopped the boats as well as we could with mud. The next morning,

Sunday, March 28, 1806, the canoes were loaded, and at one o’clock in the afternoon we took a final leave of fort Clatsop. The wind was still high, but the alternative of remaining without provisions was so unpleasant, that we hoped to be able to double point William. We had scarcely left the fort when we met Delashelwilt, and a party of twenty Chinnooks, who understanding that we had been trying to procure a canoe, had brought one for sale. Being, however, already supplied, we left them, and after getting out of Meriwether’s bay, began to coast along the south side of the river: we doubled point William without any injury, and at six o’clock reached, at the distance of sixteen

This, I believe, exceeds in magnitude any other known. From the natives captain Hill learned that they were all in good health and spirits; had met many difficulties on their progress, from various tribes of Indians, but had found them about the sources of the Missouri very friendly, as were those on Columbia river and the coast.
miles from fort Clatsop, the mouth of a small creek, where we found our hunters. They had been fortunate enough to kill two elk, but at such a distance that we could not send for them before the next morning.

Monday, March 24, when they were brought in for breakfast. We then proceeded. The country is covered with a thick growth of timber: the water however is shallow to the distance of four miles from shore; and although there is a channel deep enough for canoes on the south side, yet as the tide was low, we found some difficulty in passing along. At one o’clock we reached the Cathlamah village, where we halted for about two hours, and purchased some wappatoo and a dog for the invalids. This village we have already described, as situated opposite to the seal islands. On one of these the Indians have placed their dead in canoes, raised on scaffolds, above the reach of the tide. These people seem to be more fond of carving in wood than their neighbours, and have various specimens of their taste about the houses. The broad pieces supporting the roof and the board through which doors are cut, are the objects on which they chiefly display their ingenuity, and are ornamented with curious figures, sometimes representing persons in a sitting posture supporting a burden. On resuming our route among the seal islands, we mistook our way, which an Indian observing, he pursued us and put us into the right channel. He soon, however, embarrassed us, by claiming the canoe we had taken from the Clatsops, and which he declared was his property: we had found it among the Clatsops, and seized it as a reprisal for a theft committed by that nation; but being unwilling to do an act of injustice to this Indian, and having no time to discuss the question of right, we compromised with him for an elk skin, with which he returned perfectly satisfied. We continued our route along the shore, and after making fifteen miles encamped at an old village of nine houses, opposite to the lower village of the Wahkiacums. Here we were overtaken by two Chinooks, who
came to us after dark, and spent the night at our camp. We found plenty of wood for fires, which were quite necessary, as the weather had become cold. This morning,

Tuesday 25, proved so disagreeably cold that we did not set out before seven o'clock, when having breakfasted, we continued along the southern side of the river. The wind, however, as well as a strong current was against us, so that we proceeded slowly. On landing for dinner at noon, we were joined by some Clatsops, who had been on a trading voyage to the Skilloots, and were now on their return loaded with dried anchovies, wappatoo, and sturgeon. After dinner we crossed the river to a large island, along the side of which we continued about a mile till we reached a single house, occupied by three men, two women, and the same number of boys, all of the Cathlamah nation. They were engaged in fishing or trolling for sturgeon, of which they had caught about a dozen, but they asked so much for them that we were afraid to purchase. One of the men purchased the skin of a sea-otter, in exchange for a dressed elk skin and a handkerchief. Near adjoining this house was another party of Cathlamahs, who had been up the river on a fishing excursion, and been successful in procuring a large supply, which they were not disposed to sell. We proceeded on to the head of the island, and then crossed to the north side of the river. Here the coast formed a continued swamp for several miles back, so that it was late in the evening before we were able to reach a spot fit for our camp. At length we discovered the entrance of a small creek, opposite to the place where we were encamped on the sixth of November, and though the ground was low and moist, yet as the spot was sheltered from the wind, we resolved to pass the night there: we had now made fifteen miles. Here we found another party of ten Cathlamahs, who had established a temporary residence here for the purpose of fishing sturgeon and taking seal, in both of which they had been successful. They gave us some of the flesh
of the seal, which was a valuable addition to the lean elk. The low grounds which we passed are supplied with cottonwood, and the tree resembling the ash, except in its leaf, with red willow, broad-leaved willow, seven bark, gooseberry, green briar, and the large-leaved thorn. The wind was very high towards evening, and continued to blow so violent in the morning.

March 26, that we could not set out before eight o'clock. In the meantime finding that one of our neighbours, the Cathlamahs, by name Wallale, was a person of distinction, we gave him a medal of a small size, with which he was invested with the usual ceremonies. He appeared highly gratified, and requited us with a large sturgeon. The wind having abated, we proceeded to an old village, where we halted for dinner, having met on the way Sahawacap the principal chief of all the Cathlamahs, who was on his return from a trading voyage up the river, with wappatoo and fish, some of which he gave us, and we purchased a little more. At dinner we were overtaken by two Wahkiacums, who have been following us for twenty-four hours, with two dogs, for which they are importuning us to give them some tobacco; but as we have very little of that article left, they were obliged to go off disappointed. We received at the same time an agreeable supply of three eagles and a large goose, brought in by the hunters. After dinner we passed along the north shore opposite to a high fine bottom and dry prairie, at the upper end of which, near a grove of white-oak trees, is an island which we called Fanny's island. There were some deer and elk at a distance in the prairie, but as we could not stay to hunt, we continued till late in the evening, when we encamped on the next island above Fanny's. According to the estimate we made in descending the river, which we begin, however, to think was short, our journey of to-day was eighteen miles. Some Indians came to us, but we were occupied in procuring wood, which we found it difficult to obtain in sufficient quantity for our purposes, and they therefore did not remain long.
Thursday, 27. We set out early, and were soon joined by some Skilloots, with fish and roots for sale. At ten o'clock we stopped to breakfast at two houses of the same nation, where we found our hunters, who had not returned to camp last night, but had killed nothing. The inhabitants seemed very kind and hospitable. They gave almost the whole party as much as they could eat of dried anchovies, wappato, sturgeon, quamash, and a small white tuberous root, two inches long, and as thick as a man's finger, which, when eaten raw, is crisp, milky, and of an agreeable flavour. The Indians also urged us to remain with them all day, and hunt elk and deer, which they said were abundant in the neighbourhood; but as the weather would not permit us to dry and pitch our canoes, we declined their offer and proceeded. At the distance of two miles we passed the entrance of Coweliskee river. This stream discharges itself on the north side of the Columbia, about three miles above a remarkably high rocky knoll, the south side of which it washes in passing, and which is separated from the northern hills by a wide bottom of several miles in extent. The Coweliskee is one hundred and fifty yards wide, deep and navigable, as the Indians assert, for a considerable distance, and most probably waters the country west and north of the range of mountains which cross the Columbia between the great falls and rapids. On the lower side of this river, a few miles from its entrance into the Columbia, is the principal village of the Skilloots, a numerous people, differing, however, neither in language, dress, nor manners, from the Clatsops, Chinnooks, and other nations at the mouth of the Columbia. With the Chinnooks they have lately been at war, and though hostilities have ceased, yet they have not resumed their usual intercourse, so that the Skilloots do not go as far as the sea, nor do the Chinnooks come higher up than the Seal islands, the trade between them being carried on by the Clatsops, Cathlamahs, and Wahkiacums, their mutual friends. On this same river, above the Skilloots, resides the nation called Hulooetell, of
whom we learnt nothing, except that the nation was numerous. Late in the evening we halted at the beginning of the bottom land, below Deer Island, after having made twenty miles. Along the low grounds on the river were the cottonwood, sweet-willow, the oak, ash, the broad-leaved ash, and the growth resembling the beech; while the hills are occupied almost exclusively by different species of fir, and the black alder is common to the hills as well as the low grounds. During the day we passed a number of fishing camps, on both sides of the river, and were constantly attended by small parties of the Skilloots, who behaved in the most orderly manner, and from whom we purchased as much fish and roots as we wanted on very moderate terms. The night continued as the day had been, cold, wet, and disagreeable.

Friday, 28. We left our camp at an early hour, and by nine o'clock reached an old Indian village on the left side of Deer Island. Here we found a party of our men whom we had sent on yesterday to hunt, and who now returned after killing seven deer, in the course of the morning, out of upwards of a hundred which they had seen. They were the common fallow deer with long tails, and though very poor are better than the black-tailed fallow deer of the coast, from which they differ materially. Soon after our arrival the weather became fair, and we therefore immediately hauled the boats on shore, and having dried them by means of large fires, put on the pitch. We also took this opportunity of drying our baggage; and as some of the hunters had not yet returned, it was deemed advisable to pass the night at our present camp. This island, which has received from the Indians the appropriate name of Elalah, or Deer Island, is surrounded on the water side by an abundant growth of cotton-wood, ash, and willow, while the interior consists chiefly of prairies interspersed with ponds. These afford refuge to great numbers of geese, ducks, large swan, sandhill cranes, a few canvass-backed ducks, and particularly
The duckinmallard, the most abundant of all. There are also great numbers of snakes resembling our gartersnakes in appearance, and like them not poisonous. Our hunters brought in three deer, a goose, some ducks, an eagle, and a tyger-eat, but such is the extreme voracity of the vultures, that they had devoured in the space of a few hours, four of the deer killed this morning; and one of our men declared, that they had besides dragged a large buck about thirty yards, skinned it, and broke the back-bone. We were visited during the day by a large canoe with ten Indians of the Quathlapotle nation, who reside about seventeen miles above us. We had advanced only five miles to-day.

Saturday, 29. At an early hour we proceeded along the side of Deer island, and halted for breakfast at the upper end of it, which is properly the commencement of the great Columbia valley. We were here joined by three men of the Towahnahiook nation, with whom we proceeded, till at the distance of fourteen miles from our camp of last evening we reached a large inlet or arm of the river, about three hundred yards wide, up which they went to their villages. A short distance above this inlet a considerable river empties itself from the north side of the Columbia. Its name is Chawahnahiooks. It is about one hundred and fifty yards wide, and at present discharges a large body of water, though the Indians assure us that at a short distance above its mouth, the navigation is obstructed by falls and rapids. Three miles beyond the inlet is an island near the north shore of the river, behind the lower end of which is a village of Quathlapotles, where we landed, about three o'clock. The village consists of fourteen large wooden houses. The people themselves received us very kindly, and voluntarily spread before us wappatoo and anchovies, but as soon as we had finished enjoying this hospitality, if it deserves that name, they began to ask us for presents. They were, however, perfectly satisfied with the small articles which we distributed according to custom, and equally pleased with
our purchasing some wappatoo, twelve dogs and two sea-
otterskins. We also gave to the chief a small medal, which
he, however, soon transferred to his wife. After remaining
some time we embarked, and coasting along this island,
which after the nation we called Quathlapotle island, en-
camped for this night in a small prairie on the north side of
the Columbia, having made by estimate nineteen miles. The
river is rising fast. In the course of the day we saw great
numbers of geese, ducks, and large and small swans, which
last are very abundant in the ponds where the wappatoo
grows, as they feed much on that root. We also observed
the crested king-fisher, and the large and small blackbird:
and this evening heard, without seeing, the large hooting
owl. The frogs, which we have not found in the wetmarshes
near the entrance of the Columbia, are now croaking in the
swamps and marshes with precisely the same note common
in the United States. The gartersnakes appear in vast
quantities, and are scattered through the prairies in large
bundles of forty or fifty entwined round each other; among
the moss on the rocks we observed a species of small wild
onions growing so closely together as to form a perfect turf,
and equal in flavour to the shives of our gardens, which they
resemble in appearance also.

Sunday, 30. Soon after our departure we were met by
three Clanaminamums, one of whom we recognised as our
companion yesterday. He pressed us very much to visit his
countrymen on the inlet, but we had no time to make the
circuit, and parted. We had not proceeded far before a party of
Claxtars, and Cathlacumups, passed us in two canoes, on
their way down the river; and soon after we were met
by several other canoes, filled with persons of different
tribes on each side of the river. We passed, also, several
fishing camps, on Wappatoo island, and then halted for
breakfast on the north side of the river, near our camp of
the 4th of November. Here we were visited by several ca-
noes from two villages on Wappatoo island; the first, about
two miles above us, is called [Clahnaquah], the other a mile above them, has the name of [Multnomah]. After higgling much in the manner of those on the seacoast, these Indians gave us a sturgeon with some wappatoo and pashequaw in exchange for small fishhooks. As we proceeded we were joined by other Indians, and on coming opposite to the Clahnaquah village, we were shown another village about two miles from the river on the northeast side, and behind a pond running parallel with it. Here they said the tribe called Shotos resided. About four o'clock the Indians all left us. Their chief object in accompanying us appeared to be to gratify curiosity; but though they behaved in the most friendly manner, most of them were prepared with their instruments of war. About sunset we reached a beautiful prairie, opposite the middle of what we had called Image-canoe island, and having made twenty-three miles, encamped for the night. In the prairie is a large pond or lake, and an open grove of oak borders the back part. There are many deer and elk in the neighbourhood, but they are very shy, and the annual fern which is now abundant and dry, make such a rustling as the hunters pass through it, that they could not come within reach of the game, and we obtained nothing but a single duck.

Monday 31. We set out very early, and at eight o'clock landed on the north side of the river and breakfasted. Directly opposite is a large wooden house, belonging to the Shahala nation, the inhabitants of which came over to see us. We had observed in descending the river last year, that there were at the same place, twenty-four other houses built of wood and covered with straw, all of which are now destroyed: on inquiry the Indians informed us, that their relations whom we saw last fall, usually visit them at that season for the purpose of hunting deer and elk, and collecting wappatoo, but that they had lately returned to their permanent residence at the Rapids, we presume in order to prepare for the salmon season, as that fish will soon begin
to run. At ten o’clock we resumed our route along the north side of the river, and having passed Diamond island, and Whitebrant island, halted for the night at the lower point of a handsome prairie. Our camp which is twenty-five miles from that of last night, is situated opposite to the upper entrance of Quicksand river: a little below a stream from the north empties itself into the Columbia, near the head of Whitebrant island. It is about eighty yards wide, and at present discharges a large body of very clear water, which near the Columbia overflows its low banks, and forms several large ponds. The natives inform us that this river is of no great extent, and rises in the mountains near us, and that at a mile from its mouth it is divided into two nearly equal branches, both of which are incapable of being navigated, on account of their numerous falls and rapids. Not being able to learn any Indian name, we called it Seal river, from the abundance of those animals near its mouth. At the same place we saw a summer duck, or a wood duck, as it is sometimes called; it is the same with those of the United States, and the first we had seen since entering the Rocky mountains last summer.

The hunters who had been obliged to halt below Seal river on account of the waves being too high for their small canoe, returned after dark with the unwelcome news that game was scarce in that quarter.

Tuesday, April 1. Three Indians had followed us yesterday, and encamped near us last night. On putting to them a variety of questions relative to their country, they assured us that Quicksand river, which we had hitherto deemed so considerable, extends no further than the southwest side of mount Hood, which is south 85º east, forty miles distant from this place; that it is moreover navigable for a very short distance only, in consequence of falls and rapids, and that no nation inhabits its borders. Several other persons affirmed that it rose near mount Hood, and sergeant Pryor, who was sent for the purpose of examining it, convinced us
of the truth of their statement. He had found the river three hundred yards wide, though the channel was not more than fifty yards, and about six feet deep. The current was rapid, the water turbid, the bed of the river is formed entirely of quicksand, and the banks low and at present overflowed. He passed several islands, and at three and a half miles distance a creek from the south, fifty yards wide; his farthest course was six miles from the mouth of the river, but there it seemed to bend to the east, and he heard the noise of waterfalls. If Quicksand river then does not go beyond Mount Hood, it must leave the valley a few miles from its entrance, and run nearly parallel with the Columbia. There must therefore be some other large river, which we have not yet seen, to water the extensive country between the mountains of the coast and Quicksand river: but the Indians could give us no satisfactory information of any such stream.

Whilst we were making these inquiries, a number of canoes came to us, and among the rest a number of families were descending the river. They told us that they lived at the Great rapids, but that a great scarcity of provisions there, had induced them to come down in hopes of finding subsistence in this fertile valley. All those who lived at the rapids, as well as the nations above them, were in much distress for want of food, having consumed their winter store of dried fish, and not expecting the return of the salmon before the next full moon, which will happen on the second of May: this intelligence was disagreeable and embarrassing. From the falls to the Chopunnish nation the plains afford no deer, elk, or antelope, on which we can rely for subsistence. The horses are very poor at this season, and the dogs must be in the same condition if their food the fish have failed, so that we had calculated entirely on purchasing fish. On the other hand it is obviously inexpedient to wait for the return of the salmon, since in that case we might not reach the Missouri before the ice would prevent our navigating it. We might besides hazard the loss of our horses, for the
Chopunnish, with whom we left them, intend crossing the mountains as early as possible, which is about the beginning of May, and they would take our horses with them, or suffer them to disperse, in either of which cases the passage of the mountains will be almost impracticable. We therefore, after much deliberation, decided to remain here till we collect meat enough to last us till we reach the Chopunnish nation, to obtain canoes from the natives as we ascend, either in exchange for our periougues, or by purchasing them with skins and merchandise. These canoes may in turn be exchanged for horses with the natives of the plains, till we obtain enough to travel altogether by land. On reaching the southeast branch of the Columbia, four or five men shall be sent on to the Chopunnish to have our horses in readiness, and thus we shall have a stock of horses sufficient to transport our baggage and to supply us with provisions, for we now perceive that they will form our only certain resource for food.

The hunters returned from the opposite side of the river with some deer and elk, which were abundant there, as were also the tracks of the black bear; while on the north side we could kill nothing.

In the course of our dealings to-day we purchased a canoe from an Indian, for which we gave six fathom of wampum beads. He seemed perfectly satisfied and went away, but returned soon after, cancelled the bargain, and giving back the wampum requested that we would restore him the canoe. To this we consented, as we knew this method of trading to be very common and deemed perfectly fair.

Wednesday, 2. Being now determined to collect as much meat as possible, two parties, consisting of nine men, were sent over the river to hunt, three were ordered to range the country on this side, while all the rest were employed in cutting and scaffolding the meat which we had already. About eight o'clock several canoes arrived to visit us, and among the rest were two young men, who were pointed out as Cas-
hooks. On inquiry, they said that their nation resided at the falls of a large river, which empties itself into the south side of the Columbia, a few miles below us, and they drew a map of the country, with a coal on a mat. In order to verify this information, captain Clarke persuaded one of the young men, by a present of a burning glass, to accompany him to the river, in search of which he immediately set out with a canoe and seven of our men. After his departure other canoes arrived from above, bringing families of women and children, who confirmed the accounts of a scarcity of provisions. One of these families, consisting of ten or twelve persons, encamped near us, and behaved perfectly well. The hunters on this side of the river, returned with the skins of only two deer, the animals being too poor for use.

Thursday, 3. A considerable number of Indians crowded us to-day, many of whom came from the upper part of the river. These poor wretches confirm the reports of scarcity among the nations above; which, indeed, their appearance sufficiently prove, for they seem almost starved, and greedily pick the bones and refuse meat thrown away by us.

In the evening captain Clarke returned from his excursion. On setting out yesterday at half past eleven o'clock, he directed his course along the south side of the river, where, at the distance of eight miles, he passed a village of the Nechacohee tribe, belonging to the Eloot nation. The village itself is small, and being situated behind Diamond island, was concealed from our view as we passed both times along the northern shore. He continued till three o'clock, when he landed at the single house already mentioned, as the only remains of a village of twenty-four straw huts. Along the shore were great numbers of small canoes for gathering wappatoo, which were left by the Shahalas, who visit the place annually. The present inhabitants of the house are part of the Neerchokioo tribe of the same nation. On entering one of the apartments of the house, captain Clarke offered several articles to the Indians, in ex-
change for wappatoo, but they appeared sullen and ill-humoured, and refused to give him any. He therefore sat down by the fire, opposite to the men, and taking a port-fire match from his pocket, threw a small piece of it into the flame, at the same time took his pocket compass, and by means of a magnet, which happened to be in his inkhorn, made the needle turn round very briskly. The match now took fire, and burned violently, on which, the Indians terrified at this strange exhibition, immediately brought a quantity of wappatoo, and laid it at his feet, begging him to put out the bad fire: while an old woman continued to speak with great vehemence, as if praying and imploring protection. Having received the roots, captain Clarke put up the compass, and as the match went out of itself, tranquillity was restored, though the women and children still took refuge in their beds, and behind the men. He now paid them for what he had used, and after lighting his pipe, and smoking with them, he continued down the river. He now found what we had called Image-canoe island, to consist of three islands, the one in the middle concealing the opening between the other two in such a way, as to present to us on the opposite side of the river, the appearance of a single island. At the lower point of the third, and thirteen miles below the last village, he entered the mouth of a large river, which was concealed by three small islands in its mouth, from those who descend or go up the Columbia. This river, which the Indians call Multnomah, from a nation of the same name, residing near it on. Wappatoo island, enters the Columbia, one hundred and forty miles from the mouth of the latter river, of which it may justly be considered as forming one fourth, though it had now fallen eighteen inches below its greatest annual height. From its entrance mount Regnier bears nearly north, mount St. Helen's north, with a very high humped mountain a little to the east of it, which seems to lie in the same chain with the conic-pointed mountains before mentioned. Mount Hood bore due east, and
captain Clarke now discovered to the southeast, a mountain which we had not yet seen, and to which he gave the name of mount Jefferson. Like mount St. Helen’s, its figure is a regular cone covered with snow, and is probably of equal height with that mountain, though being more distant, so large a portion of it does not appear above the range of mountains which lie between these and this point. Soon after entering the Multnomah, he was met by an old Indian descending the river alone in a canoe. After some conversation with him, the pilot informed captain Clarke, that this old man belonged to the Clackamos nation, who reside on a river forty miles up the Multnomah. The current of this latter river, is as gentle as that of the Columbia, its surface is smooth and even, and it appears to possess water enough for the largest ship, since, on sounding with a line of five fathoms, he could find no bottom for at least one third of the width of the stream. At the distance of seven miles, he passed a sluice or opening, on the right, eighty yards wide, and which separates Wappatoo island from the continent, by emptying itself into the inlet below. Three miles further up, he reached a large wooden house, on the east side, where he intended to sleep, but on entering the rooms he found such swarms of fleas that he preferred lying on the ground in the neighbourhood. The guide informed him that this house is the temporary residence of the Nemalquinner tribe of the Cushook nation, who reside just below the falls of the Multnomah, but come down here occasionally to collect wappatoo: it was thirty feet long, and forty deep; built of broad boards, covered with the bark of white cedar; the floor on a level with the surface of the earth, and the arrangement of the interior like those near the seacoast. The inhabitants had left their canoes, mats, bladders, train-oil, baskets, bowls, and trenchers, lying about the house at the mercy of every visiter; a proof, indeed, of the mutual respect for the property of each other, though we have had very conclusive evidence that the property of white men is
not deemed equally sacred. The guide informed him further, that a small distance above were two bayous, on which were a number of small houses belonging to the Cushooks, but that the inhabitants had all gone up to the falls of the Multnomah, for the purpose of fishing. Early the next morning captain Clarke proceeded up the river, which, during the night, had fallen about five inches. At the distance of two miles he came to the centre of a bend under the highlands on the right side, from which its course, as could be discerned, was to the east of southeast. At this place the Multnomah is five hundred yards wide, and for half that distance across, the cord of five fathoms would not reach the bottom. It appears to be washing away its banks, and has more sandbars and willow points than the Columbia. Its regular gentle current, the depth and smoothness, and uniformity with which it rolls its vast body of water, prove that its supplies are at once distant and regular; nor, judging from its appearance and courses, is it rash to believe that the Multnomah and its tributary streams water the vast extent of country between the western mountains and those of the seacoast, as far perhaps as the waters of the gulf of California. About eleven o'clock he reached the house of the Neerchokioo, which he now found to contain eight families; but they were all so much alarmed at his presence, notwithstanding his visit yesterday, that he remained a very few minutes only. Soon after setting out, he met five canoes filled with the same number of families, belonging to the Shahala nation. They were descending the river in search of subsistence, and seemed very desirous of coming alongside of the boat; but as there were twenty-one men on board, and the guide said that all these Shahalas, as well as their relations at the house which we had just left, were mischievous bad men, they were not suffered to approach. At three o'clock he halted for an hour at the Nechecolee house, where his guide resided. This large building is two hundred and twenty-six feet in front, entirely
above ground, and may be considered as a single house, because the whole is under one roof; otherwise it would seem more like a range of buildings, as it is divided into seven distinct apartments, each thirty feet square, by means of broad boards set on end from the floor to the roof. The apartments are separated from each other by a passage or alley four feet wide, extending through the whole depth of the house, and the only entrance is from this alley, through a small hole about twenty-two inches wide, and not more than three feet high. The roof is formed of rafters and round poles laid on them longitudinally. The whole is covered with a double row of the bark of the white cedar, extending from the top eighteen inches over the caves, and secured as well as smoothed by splinters of dried fir, inserted through it at regular distances. In this manner the roof is made light, strong, and durable. Near this house are the remains of several other large buildings, sunk in the ground and constructed like those we had seen at the great narrows of the Columbia, belonging to the Eloots, with whom these people claim an affinity. In manners and dress these Nechoolees differ but little from the Quathlapotles and others of this neighbourhood; but their language is the same used by the Eloots, and though it has some words in common with the dialects spoken here, yet the whole air of the language is obviously different. The men too are larger, and both sexes better formed than among the nations below; and the females are distinguished by wearing larger and longer robes, which are generally of deer skin dressed in the hair, than the neighbouring women. In the house were several old people of both sexes, who were treated with much respect, and still seemed healthy, though most of them were perfectly blind. On inquiring the cause of the decline of their village, an old man, the father of the guide, and a person of some distinction, brought forward a woman very much marked with the small-pox, and said, that when a girl she was very near dying with the disorder which had
left those marks, and that all the inhabitants of the houses now in ruins had fallen victims to the same disease. From the apparent age of the woman, connected with her size at the time of her illness, captain Clarke judged that the sickness must have been about thirty years ago, the period about which we have supposed that the small-pox prevailed on the seacoast.

He then entered into a long conversation with regard to all the adjacent country and its inhabitants, which the old man explained with great intelligence, and then drew with his finger in the dust a sketch of the Multnomah and Wappatoo island. This captain Clarke copied and preserved. He now purchased five dogs, and taking leave of the Nechecolee village, returned to camp.
CHAPTER IX.

Description of Wappatoo island, and the mode in which the nations gather wappatoo—the character of the soil and its productions—the numerous tribes residing in its vicinity—the probability that they were all of the tribe of the Multnomahs originally, inferred from similarity of dress, manners, language, &c.—description of their dress, weapons of war, their mode of burying the dead—description of another village, called the Wahclellah village—their mode of architecture—extraordinary height of Beacon rock—Unfriendly character of the Indians at that place—The party, alarmed for their safety, resolve to inflict summary vengeance, in case the Wahclellah tribe persist in their outrages and insults—interview with the chief of that tribe, and confidence restored—difficulty of drawing the canoes over the rapids—visited by a party of the Yehugh tribe—short notice of the Weocksockwillackum tribe—curious phenomenon observed in the Columbia, from the Rapids to the Chilluckitequaws.

Friday, April 4, 1804. The hunters were still out in every direction. Those from the opposite side of the river returned with the flesh of a bear and some venison, but the flesh of six deer and an elk which they had killed was so meagre and unfit for use, that they had left it in the woods. Two other deer were brought in, but as the game seemed poor, we despatched a large party to some low grounds on the south, six miles above us, to hunt there until our arrival. As usual many of the Indians came to our camp, some descending the rivers with their families, and others from below with no object except to gratify their curiosity.

The visit of captain Clarke to the Multnomahs, now enabled us to combine all that we had seen or learnt of the neighbouring countries and nations. Of these the most important spot is Wappatoo island, a large extent of country lying between the Multnomah and an arm of the Columbia, which we have called Wappatoo inlet and separated from the main land by a sluice eighty yards wide, which at the distance
of seven miles up the Multnomah connects that river with the inlet. The island thus formed is about twenty miles long, and varies in breadth from five to ten miles: the land is high and extremely fertile, and on most parts is supplied with a heavy growth of cottonwood, ash, the large-leafed ash, and sweet-willow, the black alder, common to the coast, having now disappeared. But the chief wealth of this island consists of the numerous ponds in the interior, abounding with the common arrowhead (sagittaria sagittifolia) to the root of which is attached a bulb growing beneath it in the mud. This bulb, to which the Indians give the name of wappatoo, is the great article of food, and almost the staple article of commerce on the Columbia. It is never out of season; so that at all times of the year, the valley is frequented by the neighbouring Indians who come to gather it. It is collected chiefly by the women, who employ for the purpose canoes from ten to fourteen feet in length, about two feet wide, and nine inches deep, and tapering from the middle, where they are about twenty inches wide. They are sufficient to contain a single person and several bushels of roots, yet so very light that a woman can carry them with ease; she takes one of these canoes into a pond where the water is as high as the breast, and by means of her toes, separates from the root this bulb, which on being freed from the mud rises immediately to the surface of the water, and is thrown into the canoe. In this manner these patient females remain in the water for several hours even in the depth of winter. This plant is found through the whole extent of the valley in which we now are, but does not grow on the Columbia farther eastward. This valley is bounded westward by the mountainous country bordering the coast, from which it extends eastward thirty miles in a direct line, till it is closed by the range of mountains crossing the Columbia above the great falls. Its length from north to south we are unable to determine, but we believe that the valley must extend to a great distance: it is in fact the only desirable situation for a
settlement on the western side of the Rocky mountains, and being naturally fertile, would, if properly cultivated, afford subsistence for forty or fifty thousand souls. The highlands are generally of a dark rich loam, not much injured by stones, and though waving, by no means too steep for cultivation, and a few miles from the river they widen at least on the north side, into rich extensive prairies. The timber on them is abundant, and consists almost exclusively of the several species of fir already described, and some of which grow to a great height. We measured a fallen tree of that species, and found that including the stump of about six feet, it was three hundred and eighteen feet in length, though its diameter was only three feet. The dogwood is also abundant on the uplands: it differs from that of the United States in having a much smoother bark, and in being much larger, the trunk attaining a diameter of nearly two feet. There is some white cedar of a large size, but no pine of any kind. In the bottom lands are the cottonwood ash, large leafed ash, and sweet willow. Interspersed with these are the pashequaw, shanataque, and compound fern, of which the natives use the roots, the red flowering current abounds on the upland, while along the river bottoms grow luxuriantly the water-cress, strawberry, cinquefoil, narrowdock, sandrush, and the flowering pea, which is not yet in bloom. There is also a species of the bear's-claw now blooming, but the large leafed thorn has disappeared, nor do we see any longer the huckleberry, the shallun, nor any of the other evergreen shrubs which bear berries, except the species, the leaf of which has a prickly margin.

Among the animals, we observe the martin, small geese, the small speckled woodpecker, with a white back, the blue-crested corvus, ravens, crows, eagles, vultures, and hawks. The mellow bug, long-legged spider, as well as the butterfly and blowingfly, and tick, have already made their appearance, but none of all these are distinguished from animals
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of the same sort in the United States. The musquetoes too have resumed their visits, but are not yet troublesome.

The nations who inhabit this fertile neighbourhood are very numerous. The Wappatoo inlet extends three hundred yards wide, for ten or twelve miles to the south, as far as the hills near which it receives the waters of a small creek whose sources are not far from those of the Killamuck river. On that creek resides the Clackstar nation, a numerous people of twelve hundred souls, who subsist on fish and wappatoo, and who trade by means of the Killamuck river, with the nation of that name on the seacoast. Lower down the inlet, towards the Columbia, is the tribe called Cathlacumup. On the sluice which connects the inlet with the Multnomah, are the tribes, Cathlanahquiah, and Cathlacomatup: and on Wappatoo island, the tribes of Clannahminamun, and Clahnaquah. Immediately opposite, near the Towahnahhook, are the Quathlapotles, and higher up on the side of the Columbia, the Shotos. All these tribes, as well as the Cathlahaws, who live somewhat lower on the river, and have an old village on Deer island, may be considered as parts of the great Multnomah nation, which has its principal residence on Wappatoo island, near the mouth of the large river to which they give their name. Forty miles above its junction with the Columbia, it receives the waters of the Clackamos, a river which may be traced through a woody and fertile country to its sources in Mount Jefferson, almost to the foot of which it is navigable for canoes. A nation of the same name resides in eleven villages along its borders: they live chiefly on fish and roots, which abound in the Clackamos and along its banks, though they sometimes descend to the Columbia to gather wappatoo; where they cannot be distinguished by dress or manners, or language from the tribes of Multnomahs. Two days' journey from the Columbia, or about twenty miles beyond the entrance of the Clackamos, are the falls of the Multnomah. At this place are the permanent residences of the Cushhooks
and Chahcowahs, two tribes who are attracted to that place by
the fish, and by the convenience of trading across the moun-
tains and down Killamuck river, with the nation of Killa-
mucks, from whom they procure train oil. These falls were
occasioned by the passage of a high range of mountains; be-
yond which the country stretches into a vast level plain,
wholly destitute of timber. As far as the Indians, with whom
we conversed, had ever penetrated that country, it was in-
habited by a nation called Calahpoewah, a very numerous
people whose villages, nearly forty in number, are scattered
along each side of the Multnomah, which furnish them with
their chief subsistence, fish, and the roots along its banks.

All the tribes in the neighbourhood of Wappatoo island,
we have considered as Multnomahs; not because they are in
any degree subordinate to that nation; but they all seem to
regard the Multnomahs as the most powerful. There is no
distinguished chief, except the one at the head of the Mult-
nomahs; and they are moreover linked by a similarity of
dress and manners, and houses and language, which much
more than the feeble restraints of Indian government con-
tribute to make one people. These circumstances also se-
parate them from nations lower down the river. The Clat-
sops, Chinnooks, Wahkiacums and Cathlamahs understand
each other perfectly; their language varies, however, in some
respects from that of the Skilloots; but on reaching the
Multnomah Indians, we found, that although many words
were the same, and a great number differed only in the
mode of accenting them, from those employed by the Indians
near the mouth of the Columbia, yet there was a very sen-
sible variation of language. The natives of the valley are
larger and rather better shaped than those of the seacoast:
their appearance too is generally healthy, but they are af-
icted with the common disease of the Columbia, soreness
of the eyes. To whatever this disorder may be imputed it
is a great national calamity: at all ages their eyes are sore
and weak, and the loss of one eye is by no means uncommon, while in grown persons total blindness is frequent, and almost universal in old age. The dress of the men has nothing different from that used below, but are chiefly remarked by a passion for large brass buttons, which they fix on a sailor's jacket, when they are so fortunate as to obtain one, without regard to any arrangement. The women also wear the short robe already described; but their hair is most commonly braided into two tresses falling over each ear in front of the body, and instead of the tissue of bark, they employ a piece of leather in the shape of a pocket handkerchief tied round the loins. This last is the only and ineffectual defence when the warmth of the weather induces them to throw aside the robe. The houses are in general on a level with the ground, though some are sunk to the depth of two or three feet into the ground, and like those near the coast adorned or disfigured by carvings or paintings on the posts, doors and beds: they do not possess any peculiar weapon except a kind of broad sword made of iron, from three to four feet long, the blade about four inches wide, very thin and sharp at all its edges, as well as at the point. They have also bludgeons of wood in the same form; and both kinds generally hang at the head of their beds. These are formidable weapons. Like the natives of the seacoast, they are also very fond of cold, hot, and vapour baths, which are used at all seasons, and for the purpose of health as well as pleasure. They, however, add a species of bath peculiar to themselves, by washing the whole body with urine every morning.

The mode of burying the dead in canoes, is no longer practised by the natives here. The place of deposit is a vault formed of boards, slanting like the roof of a house from a pole supported by two forks. Under this vault the dead are placed horizontally on boards, on the surface of the earth, and carefully covered with mats. Many bodies are here laid on each other, to the height of three or four corpses, and different articles, which were most esteemed by the dead, are
placed by their side; their canoes themselves being sometimes broken to strengthen the vault.

The trade of all these inhabitants is in anchovies, sturgeon, but chiefly in wappatoo, to obtain which, the inhabitants both above land below them on the river, come at all seasons, and supply in turn, beads, cloth, and various other articles procured from the Europeans.

Saturday, April 5. We dried our meat as well as the cloudy weather would permit. In the course of his chase yesterday, one of our men who killed the bear, found a nest of another with three cubs in it. He returned to-day in hopes of finding her, but he brought only the cubs, without being able to see the dam, and on this occasion, Drewyer, our most experienced huntsman, assured us that he had never known a single instance where a female bear, who had once been disturbed by a hunter and obliged to leave her young, returned to them again. The young bears were sold for wappatoo to some of the many Indians who visited us in parties during the day, and behaved very well.

Having made our preparations of dried meat, we set out next morning,

Sunday 6, by nine o'clock, and continued along the north side of the river for a few miles, and then crossed to the river to look for the hunters, who had been sent forward the day before yesterday. We found them at the upper end of the bottom with some Indians, for we are never freed from the visits of the natives. They had killed three elk, and wounded two others so badly, that it was still possible to get them. We therefore landed, and having prepared scaffolds and secured the five elk, we encamped for the night, and the following evening.

Monday 7, the weather having been fair and pleasant, had dried a sufficient quantity of meat to serve us as far as the Chopunnish, with occasional supplies, if we can procure them, of dogs, roots, and horses. In the course of the day several parties of Shahalas, from a village eight miles above
us, came to visit us, and behaved themselves very properly, except that we were obliged to turn one of them from the camp for stealing a piece of lead. Every thing was now ready for our departure, but in the morning,

Tuesday 8, the wind blew with great violence, and we were obliged to unload our boats, which were soon after filled with water. The same cause prevented our setting out to-day; we therefore despatched several hunters round the neighbourhood, but in the evening they came back with nothing but a duck. They had, however, seen some of the black-tailed, jumping, or fallow deer, like those about Fort Clatsop, which are scarce near this place, where the common long-tailed fallow deer are most abundant. They had also observed two black bears, the only kind that we have discovered in this quarter. A party of six Indians encamped at some distance, and late at night the sentinel stopped one of the men, an old man who was creeping into camp in order to pilfer: he contented himself with frightening the Indian, and then giving him a few stripes with a switch, turned the fellow out, and he soon afterwards left the place with all his party.

Wednesday, 9. The wind having moderated, we reloaded the canoes, and set out by seven o'clock. We stopped to take up two hunters who had left us yesterday, but were unsuccessful in the chase, and then proceeded to the Wah-ellelah village, situated on the north side of the river, about a mile below Beacon rock. During the whole of the route from our camp, we passed along under high, steep, and rocky sides of the mountains, which now close on each side of the river, forming stupendous precipices, covered with the fir and white cedar. Down these heights frequently descend the most beautiful cascades, one of which, a large creek, throws itself over a perpendicular rock three hundred feet above the water, while other smaller streams precipitate themselves from a still greater elevation, and evaporating
Up the Missouri.

in a mist, again collect and form a second cascade before they reach the bottom of the rocks. We stopped to breakfast at this village. We here found the tomahawk which had been stolen from us on the fourth of last November: they assured us they had bought it of the Indians below; but as the latter had already informed us that the Wahclellahs had such an article, which they had stolen, we made no difficulty about retaking our property. This village appears to be the wintering station of the Wahclellahs and Clahecklalhs, two tribes of the Shahala nation. The greater part of the first tribe have lately removed to the falls of the Multnomah, and the second have established themselves a few miles, higher up the Columbia, opposite the lower point of Brant island, where they take salmon, that being the commencement of the rapids. They are now in the act of removing, and carrying off with them, not only the furniture and effects, but the bark and most of the boards of their houses. In this way nine have been lately removed. There are still fourteen standing, and in the rear of the village are the traces of ten or twelve others of more ancient date. These houses are either sunk in the ground or on a level with the surface, and are generally built of boards and covered with cedar bark. In the single houses there is generally a division near the door, which is in the end; or in case the house be double, opens on the narrow passage between the two. Like those we had seen below at the Neerckioo tribe, the women wear longer and larger robes than their neighbours the Multnomahs, and suspend various ornaments from the cartilage of the nose: the hair is, however, worn in the same sort of braid, falling over each ear, and the truss is universal from the Wappattoo island to Lewis's river. The men also form their hair into two queues by means of otter skin thongs, which fall over the ears so as to give that extraordinary width to the face which is here considered so ornamental. These people seemed very unfriendly, and our numbers alone seemed to secure us from
ill treatment. While we were at breakfast the grand chief of the Chilluckittequaws arrived, with two inferior chiefs, and several men and women of his nation. They were returning home, after trading in the Columbian valley and were loaded with wappatoo and dried anchovies, which, with some beads, they had obtained in exchange for chappelell, bear-grass and other small articles. As these people had been very kind to us as we descended the river, we endeavoured to repay them by every attention in our power. After purchasing, with much difficulty, a few dogs and some wappatoo from the Wahclellahs, we left them at two o'clock, and passing under the Beacon rock, reached in two hours the Clahclellah village. This Beacon rock, which we now observed more accurately than as we descended, stands on the north side of the river, insulated from the hills. The northern side has a partial growth of fir or pine. To the south it rises in an unbroken precipice to the height of seven hundred feet, where it terminates in a sharp point, and may be seen at the distance of twenty miles below. This rock may be considered as the commencement of tide-water, though the influence of the tide is perceptible here in autumn only, at which time the water is low. What the precise difference at those seasons is, we cannot determine; but on examining a rock which we lately passed, and comparing its appearance now with that which we observed last November, we judge the flood of this spring to be twelve feet above the height of the river at that time. From Beacon rock as low as the marshy islands, the general width of the river is from one to two miles, though in many places it is still greater. On landing at the Clahclellahs we found them busy in erecting their huts, which seem to be of a temporary kind only, so that most probably they do not remain longer than the salmon season. Like their countrymen, whom we had just left, these people were sulky and ill-humoured, and so much on the alert to pilfer, that we were obliged to keep them at a distance from our baggage.
our large canoes could not ascend the rapids on the north side, we passed to the opposite shore, and entered the narrow channel which separates it from Brant Island. The weather was very cold and rainy, and the wind so high, that we were afraid to attempt the rapids this evening, and therefore, finding a safe harbour, we encamped for the night. The wood in this neighbourhood has lately been on fire, and the firs have discharged considerable quantities of pitch, which we collected for some of our boats. We saw to-day some turkey-buzzards, which are the first we have observed on this side of the Rocky mountains.

Thursday, 10. Early in the morning we dropped down the channel to the lower end of Brant island, and then drew our boats up the rapid. At the distance of a quarter of a mile we crossed over to a village of Clahucklellahs, consisting of six houses, on the opposite side. The river is here about four hundred yards wide, and the current so rapid, that although we employed five oars for each canoe, we were borne down a considerable distance. While we were at breakfast, one of the Indians offered us two sheep skins for sale, one, which was the skin of a full grown sheep, was as large as that of a common deer: the second was smaller, and the skin of the head, with the horns remaining, was made into a cap, and highly prized as an ornament by the owner. He however sold the cap to us for a knife, and the rest of the skin for those of two elk; but as they observed our anxiety to purchase the other skin, they would not accept the same price for it, and as we hoped to procure more in the neighbourhood, we did not offer a greater. The horns of the animal were black, smooth, and erect, and they rise from the middle of the forehead, a little above the eyes, in a cylindrical form, to the height of four inches, where they are pointed. The Clahucklellahs informed us that the sheep are very abundant on the heights, and among the cliffs of the adjacent mountains; and that these two had been lately killed out of a herd of thirty-six, at no great distance from the
village. We were soon joined by our hunters with three black-tailed fallow deer, and having purchased a few white salmon, proceeded on our route. The south side of the river is impassable, and the rapidity of the current as well as the large rocks along the shore, render the navigation of even the north side extremely difficult. During the greater part of the day it was necessary to draw them along the shore, and as we have only a single tow-rope that is strong enough, we are obliged to bring them one after the other. In this tedious and laborious manner, we at length reached the portage on the north side, and carried our baggage to the top of a hill, about two hundred paces distant, where we encamped for the night. The canoes were drawn on shore and secured, but one of them having got loose, drifted down to the last village, the inhabitants of which brought her back to us; an instance of honesty which we rewarded with a present of two knives. It rained all night and the next morning.

Friday, 11, so that the tents, and skins which covered the baggage, were wet. We therefore determined to take the canoes first over the portage, in hopes that by the afternoon the rain would cease, and we might carry our baggage across without injury. This was immediately begun by almost the whole party, who in the course of the day dragged four of the canoes to the head of the rapids, with great difficulty and labour. A guard, consisting of one sick man and three who had been lamed by accidents, remained with captain Lewis to guard the baggage. This precaution was absolutely necessary to protect it from the Wahchellahs, whom we discovered to be great thieves, notwithstanding their apparent honesty in restoring our boat: indeed, so arrogant and intrusive have they become, that nothing but our numbers, we are convinced, saves us from attack. They crowded about us while we were taking up the boats, and one of them had the insolence to throw stones down the bank at two of our men. We now found it necessary to depart from our mild and pacific course of conduct. On returning to the head of the portage, many of them met our men, and seem-
ed very ill disposed. Shields had stopped to purchase a dog, and being separated from the rest of the party, two Indians pushed him out of the road, and attempted to take the dog from him. He had no weapon but a long knife, with which he immediately attacked them both, hoping to put them to death before they had time to draw their arrows, but as soon as they saw his design, they fled into the woods. Soon afterwards we were told by an Indian who spoke Clatsop, which we had ourselves learnt during the winter, that the Wahclellahs had carried off captain Lewis's dog to their village below. Three men well armed were instantly despatched in pursuit of them, with orders to fire if there was the slightest resistance or hesitation. At the distance of two miles, they came within sight of the thieves, who finding themselves pursued, left the dog and made off. We now ordered all the Indians out of our camp, and explained to them, that whoever stole any of our baggage, or insulted our men, should be instantly shot; a resolution which we were determined to enforce, as it was now our only means of safety. We were visited during the day by a chief of the Clahclellahs, who seemed mortified at the behaviour of the Indians, and told us that the persons at the head of their outrages were two very bad men, who belonged to the Wahclellah tribe, but that the nation did not by any means wish to displease us. This chief seemed very well disposed, and we had every reason to believe was much respected by the neighbouring Indians. We therefore gave him a small medal, and showed him all the attentions in our power, with which he appeared very much gratified, and we trust his interposition may prevent the necessity of our resorting to force against his countrymen.

Many Indians from the villages above, passed us in the course of the day, on their return from trading with the natives of the valley, and among others, we recognised an Eloot, who with ten or twelve of his nation were on their way home to the long narrows of the Columbia. These
people do not, as we are compelled to do, drag their canoes up the rapids, but leave them at the head, as they descend, and carrying their good across the portage, hire or borrow others from the people below. When the trade is over they return to the foot of the rapids, where they leave these boats and resume their own at the head of the portage. The labour of carrying the goods across is equally shared by the men and women, and we were struck by the contrast between the decent conduct of all the natives from above, and the profligacy and ill manners of the Wahclellahs. About three quarters of a mile below our camp is a burial ground, which seems common to the Wahclellahs, Clahclellahs, and Yehhuhs. It consists of eight sepulchres on the north bank of the river.

Saturday 12. The rain continued all night and this morning. Captain Lewis now took with him all the men fit for duty, and began to drag the remaining periogue over the rapids. This has become much more difficult than when we passed in the autumn; at that time there were in the whole distance of seven miles only three difficult points; but the water is now very considerably higher, and during all that distance the ascent is exceedingly laborious and dangerous, nor would it be practicable to descend, except by letting down the empty boats by means of ropes. The route over this part, from the head to the foot of the portage, is about three miles: the canoes which had been already dragged up were very much injured, by being driven against the rocks, which no precautions could prevent. This morning as we were drawing the fifth canoe round a projecting rock, against which the current sets with great violence, she unfortunately offered too much of her side to the stream. It then drove her with such force, that with all the exertions of the party we were unable to hold her, and were forced to let go the cord, and see her drift down the stream, and be irrecoverably lost. We then began to carry our effects across the portage, but as all those who had short rifles took them in order to repel any attack from the Indians, it was not until
five o'clock in the afternoon that the last of the party reached the head of the rapids, accompanied by our new friend the Wahclellah chief. The afternoon being so far advanced, and the weather rainy, and cold, we determined to halt for the night, though very desirous of going on, for during the three last days we have not advanced more than seven miles. The portage is two thousand eight hundred yards, along a narrow road, at all times rough, and now rendered slippery by the rain. About half way is an old village which the Clahclellah chief informs us is the occasional residence of his tribe. These houses are uncommonly large, one of them measured one hundred and sixty by forty feet, and the frames are constructed in the usual manner, except that it is double so as to appear like one house within another. The floors are on a level with the ground, and the roofs have been taken down and sunk in a pond behind the village. We find that our conduct yesterday has made the Indians much more respectful; they do not crowd about us in such numbers, and behave with much more propriety. Among those who visited us were about twenty of the Yehlruhs, a tribe of Shahalas, whom we had found on the north side of river, immediately above the rapids, but who had now emigrated to the opposite shore, where they generally take salmon. Like their relations, the Wahelellahs, they have taken their houses with them, so that only one is now standing where the old village was. We observe generally, that the houses which have the floor on a level with the earth, are smaller, and have more the appearance of being temporary than those which are sunk in the ground, whence we presume that the former are the dwellings during spring and summer, while the latter are reserved for the autumn and winter. Most of the houses are built of boards and covered with bark, though some of the more inferior kind are constructed wholly of cedar bark, kept smooth and flat by small splinters fixed crosswise through the bark, at the distance of twelve or fourteen inches apart. There is but little difference in appearance between these
Yehhuhs, Wahclellahs, Clahclellahs, and Neerchokioos, who compose the Shahala nation. On comparing the vocabulary of the Wahclellahs with that of the Chinnooks, we found that the names for numbers were precisely the same, though the other parts of the language were essentially different. The women of all these tribes braid their hair, pierce the nose, and some of them have lines of dots reaching from the ankle as high as the middle of the leg. These Yehhuhs behaved with great propriety, and condemned the treatment we had received from the Wahclellahs. We purchased from one of them the skin of a sheep killed near this place, for which we gave in exchange the skins of a deer and an elk. These animals, he tells us, usually frequent the rocky parts of the mountains, where they are found in great numbers. The bighorn is also an inhabitant of these mountains, and the natives have several robes made of their skins. The mountains near this place are high, steep, and strewn with rocks, which are principally black. Several species of fir, white pine, and white cedar, forms their covering, while near the river we see the cottonwood, sweet-willow, a species of maple, the broad-leafed ash, the purple haw, a small species of cherry, the purple currant, gooseberry, red-willow, the vining and whiteberry honeysuckle, the huckleberry, saca-commis, two kinds of mountain holly, and the common ash.

Sunday 13. The loss of our periogue yesterday obliges us to distribute our loading between the two canoes, and the two remaining periogues. This being done, we proceeded along the north side of the river, but soon finding that the increased leading rendered our vessels difficult to manage, if not dangerous in case of high wind, the two periogues only continued on their route, while captain Lewis with the canoes crossed over to the Yehhuh village, with a view of purchasing one or two more canoes. The village now consisted of eleven houses, crowded with inhabitants, and about sixty fighting men. They were very well disposed, and we found no difficulty in procuring two small canoes, in exchange
for two robes and four elk skins. We also purchased with
deer skins, three dogs, an animal which has now become a
favourite food, for it is found to be a strong healthy diet,
preferable to lean deer or elk, and much superior to horse-
flesh in any state. With these he proceeded along the south
side of the river, and joined us in the evening. We had gone
along the north shore as high as Cruzatte's river, to which
place we had sent some hunters the day before yesterday,
and where we were detained by the high winds. The hun-
ters however did not join us, and we therefore, as soon as the
wind had abated, proceeded on for six miles, where we halted
for captain Lewis, and in the meantime went out to hunt.
We procured two black-tailed fallow deer, which seem to be
the only kind inhabiting these mountains. Believing that
the hunters were still below us, we despatched a small ca-
noe back for them, and in the morning,

April 14, they all joined us with four more deer. After
breakfast we resumed our journey, and though the wind was
high during the day, yet by keeping along the northern
shore, we were able to proceed without danger. At one
o'clock we halted for dinner at a large village situated in a
narrow bottom, just above the entrance of Canoe creek. The
houses are detached from each other, so as to occupy an ex-
tent of several miles, though only twenty in number. Those
which are inhabited are on the surface of the earth, and
built in the same shape as those near the rapids; but there
were others at present evacuated, which are completely un-
der ground. They are sunk about eight feet deep, and cov-
ered with strong timbers, and several feet of earth in a co-
nical form. On descending by means of a ladder through a
hole at the top, which answers the double purpose of a door
and a chimney, we found that the house consisted of a sin-
gle room, nearly circular and about sixteen feet in diame-
ter.

The inhabitants, who call themselves Wooksockwillaca-
cum, differ but little from those near the rapids, the chief
distinction in dress, being a few leggings and moccasins, which we find here like those worn by the Chopunnish. These people have ten or twelve very good horses, which are the first we have seen since leaving this neighbourhood last autumn. The country below is, indeed, of such a nature, as to prevent the use of this animal, except in the Co-
lumbian valley, and there they would be of great service, for the inhabitants reside chiefly on the river side, and the country is too thickly wooded to suffer them to hunt game on horseback. Most of these, they inform us, have been taken in a warlike excursion, which was lately made against the Towanahooks, a part of the Snake nation living in the upper part of the Multnomah, to the southeast of this place. Their language is the same with that of the Chilluckitte-
quaws. They seemed inclined to be very civil, and gave us in exchange, some roots, shapelell, filberts, dried berries, and five dogs.

After dinner we proceeded, and passing at the distance of six miles, the high cliffs on the left, at the mouth of a small run on the same side. A little above us is a village, consisting of about one hundred fighting men of a tribe called Smackshops, many of whom passed the evening with us: They do not differ in any respect from the inhabitants of the village below. In hopes of purchasing horses we did not set out the next morning,

Tuesday 15, till after breakfast, and in the meantime exposed our merchandise, and made them various offers; but as they declined bartering, we left them and soon reached the Sepulchre rock where we halted a few minutes. The rock itself stands near the middle of the river, and contains about two acres of ground above high water. On this surface are scattered thirteen vaults, constructed like those below the Rapids, and some of them more than half filled with dead bodies. After satisfying our curiosity with these venerable remains, we returned to the northern shore, and proceeded to a village at the distance of four miles: on land-
ing, we found that the inhabitants belonged to the same nation we had just left, and as they also had horses, we made a second attempt to purchase a few of them: but with all our dexterity in exhibiting our wares, we could not induce them to sell, as we had none of the only articles which they seemed desirous of procuring, a sort of war hatchet, called by the northwest traders an eye-dog. We therefore purchased two dogs, and taking leave of these Weocksockwalla-cums, proceeded to another of their villages, just below the entrance of Cataract river. Here too, we tried in vain to purchase some horses, nor did we meet with more success at the two villages of Chilluckitqueuaws, a few miles farther up the river. At three in the afternoon, we came to the mouth of Quinett creek, which we ascended a short distance and encamped for the night, at the spot we had called Rock fort. Here we were soon visited by some of the people from the great narrows and falls: and on our expressing a wish to purchase horses, they agreed to meet us to-morrow on the north side of the river, where we would open a traffic. They then returned to their villages to collect the horses, and in the morning.

Wednesday 16, captain Clarke crossed with nine men, and a large part of the merchandise, in order to purchase twelve horses to transport our baggage, and some pounded fish, as a reserve during the passage of the Rocky mountains. The rest of the men were employed in hunting and preparing saddles.

From the rapids to this place, and indeed as far as the commencement of the narrows, the Columbia is from half a mile to three quarters in width, and possesses scarcely any current: its bed consists principally of rock, except at the entrance of Labiehe river, which takes its rise in mount Hood, from which, like Quicksand river, it brings down vast quantities of sand. During the whole course of the Columbia from the Rapids to the Chilluckitqueuaws are the trunks of many large pine trees standing erect in water,
which is thirty feet deep at present, and never less than ten. These trees could never have grown in their present state, for they are all very much doated, and none of them vegetate; so that the only reasonable account which can be given of this phenomenon, is, that at some period, which the appearance of the trees induces us to fix within twenty years, the rocks from the hill sides have obstructed the narrow pass at the rapids, and caused the river to spread through the woods. The mountains which border as far as the Sepulchre rock, are high and broken, and its romantic views occasionally enlivened by beautiful cascades rushing from the heights, and forming a deep contrast with the firs, cedars and pines, which darken their sides. From the Sepulchre rock, where the low country begins, the long-leafed pine is the almost exclusive growth of timber; but our present camp is the last spot where a single tree is to be seen on the wide plains, which are now spread before us to the foot of the Rocky mountains. It is, however, covered with a rich verdure of grass and herbs, some inches in height, which forms a delightful and exhilarating prospect, after being confined to the mountains and thick forests on the seacoast. The climate too, though only on the border of the plains, is here very different from that we have lately experienced. The air is drier and more pure, and the ground itself is as free from moisture as if there had been no rain for the last ten days. Around this place are many esculent plants used by the Indians: among which is a currant, now in bloom, with a yellow blossom like that of the yellow currant of the Missouri, from which however it differs specifically. There is also a species of hyacinth growing in the plains, which presents at this time a pretty flower of a pale blue colour, and the bulb of which is boiled or baked, or dried in the sun, and eaten by the Indians. This bulb, of the present year, is white, flat in shape and not quite solid, and it overlays and presses closely that of the last year,
which, though much thinner and withered, is equally wide, and sends forth from its sides a number of small radicles.

Our hunters obtained one of the long-tailed deer with the young horns, about two inches, and a large black or dark brown pheasant, such as we had seen on the upper part of the Missouri. They also brought in a large gray squirrel, and two others resembling it in shape, but smaller than the common gray squirrel of the United States, and of a pied gray and yellowish brown colour. In addition to this game, they had seen some antelopes, and the tracks of several black bear, but no appearance of elk. They had seen no birds, but found three eggs of the party-coloured corvus. Though the salmon has not yet appeared, we have seen less scarcity than we apprehended from the reports we had heard below. At the rapids, the natives subsist chiefly on a few white salmon trout, which they take at this time, and considerable quantities of a small indifferent mullet of an inferior quality. Beyond that place we see none except dried fish of the last season, nor is the sturgeon caught by any of the natives above the Columbia, their whole stores consisting of roots, and fish either dried or pounded.

Captain Clarke had, in the meantime, been endeavouring to purchase horses, without success, but they promised to trade with him if he would go up to the Skilloot village above the long narrows. He therefore sent over to us for more merchandise, and then accompanied them in the evening to that place, where he passed the night. The next day, Thursday 17, he sent to inform us that he was still unable to purchase any horses, but intended going as far as the Eneeshur village to-day, whence he would return to meet us to-morrow at the Skilloot village. In the evening the principal chief of the Chilluckittequaws came to see us, accompanied by twelve of his nation, and hearing that we wanted horses, he promised to meet us at the narrows with some for sale.
CHAPTER X.

Captain Clarke procures four horses for the transportation of the baggage—some further account of the Skilloot tribe—their joy at the first appearance of salmon in the Columbia—their thievish propensities—the party arrive at the village of the Eneeshures, where the natives are found alike unfriendly—the party now provided with horses—the party prevented from the exercise of hostility against this nation by a friendly adjustment—the scarcity of timber so great that they are compelled to buy wood to cook their provisions—arrive at the Wahhowpum village—dance of the natives—their ingenuity in declining to purchase the canoes, on the supposition that the party would be compelled to leave them behind defeated—the party having obtained a complement of horses, proceed by land—arrive at the Pishquitpuh village, and some account of that people—their frank and hospitable treatment from the Wollawollahs—their mode of dancing described—their mode of making fishweirs—their amiable character, and their unusual affection for the whites.

Friday, 18. WE set out this morning after an early breakfast, and crossing the river, continued along the north side for four miles, to the foot of the first rapid. Here it was necessary to unload and make a portage of seven paces over a rock, round which we then drew the empty boats by means of a cord, and the assistance of setting poles. We then reloaded, and at the distance of five miles, reached the basin at the foot of the long narrows. After unloading and arranging the camp, we went up to the Skilloot village, where we found captain Clarke. He had not been able to procure more than four horses, for which he was obliged to give double the price of those formerly purchased from the Shoshonees and the first tribe of Flatheads. These, however, we hoped might be sufficient with the aid of the small canoes to convey our baggage as far as the villages near the Muscleshell rapid, where horses are cheaper and more abundant, and where we may probably exchange the canoes for as many horses as we want. The Skilloots, indeed, have a
number of horses, but they are unwilling to part with them, though at last we laid out three parcels of merchandise, for each of which they promised to bring us a horse in the morning. The long narrows have a much more formidable appearance than when we passed them in the autumn, so that it would, in fact, be impossible either to descend or go up them in any kind of boat. As we had therefore no further use for the two periogues, we cut them up for fuel, and early in the morning, Saturday 19, all the party began to carry the merchandise over the portage. This we accomplished with the aid of our four horses, by three o'clock in the afternoon, when we formed our camp a little above the Skilloot village. Since we left them in the autumn they have removed their village a few hundred yards lower down the river, and have exchanged the cellars in which we then found them, for more pleasant dwellings on the surface of the ground. These are formed by sticks, and covered with mats and straw, and so large, that each is the residence of several families. They are also much better clad than any of the natives below, or than they were themselves last autumn; the dress of the men consists generally of leggings, moccasins, and large robes, and many of them wear shirts in the same form used by the Chopunnish and Shoshonees, highly ornamented, as well as the leggings and moccasins, with porcupine quills. Their modesty is protected by the skin of a fox or some other animal, drawn under a girdle and hanging in front like a narrow apron. The dress of the women differs but little from that worn near the rapids; and both sexes wear the hair over the forehead as low as the eyebrows, with large locks cut square at the ears, and the rest hanging in two queues in front of the body. The robes are made principally of the skins of deer, elk, bighorn, some wolf and buffaloe, while the children use the skins of the large gray squirrel. The buffaloe is procured from the nations higher up the river, who occasionally visit the Missouri; indeed, the
greater proportion of their apparel is brought by the nations to the northwest, who come to trade for pounded fish, copper, and beads. Their chief fuel is straw, southern-wood, and small willows. The bear-grass, the bark of the cedar, and the silk-grass are employed in various articles of manufacture.

The whole village was filled with rejoicing to-day, at having caught a single salmon, which was considered as the harbinger of vast quantities in four or five days. In order to hasten their arrival, the Indians according to custom, dressed fish and cut it into small pieces, one of which was given to each child in the village. In the good humour excited by this occurrence, they parted, though reluctantly, with four other horses, for which we gave them two kettles, reserving only a single small one for a mess of eight men. Unluckily, however, we lost one of the horses by the negligence of the person to whose charge he was committed. The rest were therefore hobbled and tied; but as the nations here do not understand gelding, all the horses but one were stallions, and this being the season when they are most vicious, we had great difficulty in managing them, and were obliged to keep watch over them all night. In the afternoon captain Clarke set out with four men for the Eneeshur village at the grand falls, in order to make further attempts to procure horses.

Sunday, 20. As it was obviously our interest to preserve the, good will of these people, we passed over several small thefts which they have committed, but this morning we learnt that six tomahawks and a knife had been stolen during the night. We addressed ourselves to the chief, who seemed angry with his people and made a harangue to them, but we did not recover the articles, and soon after, two of our spoons were missing. We therefore ordered them all from our camp, threatening to heat severely any one detected in purloining. This harshness irritated them so much that they left us in an ill-humour, and we therefore kept on our guard against any insult. Be-
sides this knavery, the faithlessness of the people is intolerable, frequently after receiving goods in exchange for a horse, they return in a few hours and insist on revoking the bargain, or receiving some additional value. We discovered too, that the horse which was missing yesterday, had been gambled away by the fellow from whom we had purchased him, to a man of a different nation, who had carried him off. Besides these, we bought two more horses, two dogs, and some chapelell, and also exchanged a couple of elk skins for a gun belonging to the chief. This was all we could obtain, for though they had a great abundance of dried fish, they would not sell it, except at a price too exorbitant for our finances. We now found that no more horses could be procured, and therefore prepared for setting out to-morrow. One of the canoes, for which the Indians would give us very little, was cut up for fuel, two others, together with some elk skins and pieces of old iron, we bartered for beads, and the remaining two small canoes were despatched early next morning.

Monday, 21, with all the baggage which could not be carried on horseback. We had intended setting out at the same time, but one of our horses broke loose during the night, and we were under the necessity of sending several men in search of him. In the meantime, the Indians, who were always on the alert, stole a tomahawk, which we could not recover, though several of them were searched. Another fellow was detected in carrying off a piece of iron, and kicked out of camp: captain Lewis then, addressing the Indians, declared that he was not afraid to fight them; for if he chose, he might easily put them to death, and burn their village; that he did not wish to treat them ill if they did not steal; and that although if he knew who had the tomahawks he would take away the horses of the thieves, yet he would rather loose the property altogether than take the horse of an innocent man. The chiefs were present at this harangue, hung their heads and made no reply. At ten o'clock the
men returned with the horse, and soon after, an Indian who had promised to go with us as far as the Chopunnish, came with two horses, one of which he politely offered to carry our baggage. We therefore loaded nine horses, and giving the tenth to Bratton, who was still too sick to walk, about ten o'clock left the village of these disagreeable people. At one o'clock we arrived at the [village of the Eneeshurs, where we found captain Clarke, who had been completely unsuccessful in his attempts to purchase horses, the Eneeshurs being quite as unfriendly as the Skilloots. Fortunately, however, the fellow who had sold a horse, and afterwards lost him at gambling, belonged to this village, and we insisted on taking the kettle and knife which had been given to him for the horse, if he did not replace it by one of equal value. He preferred the latter, and brought us a very good horse. Being here joined by the canoes and baggage across the portage, we halted half a mile above the town, and took dinner on some dogs, after which we proceeded on about four miles and [encamped at a village of Eneeshurs, consisting of nine mat huts, a little below the mouth of the Towahnahooks. We obtained from these people a couple of dogs and a small quantity of fuel, for which we were obliged to give a higher price than usual. We also bought a horse with a back so much injured, that he can scarcely be of much service to us, but the price was some trifling articles, which in the United States would cost about a dollar and a quarter. The dress, the manners, and the language of the Eneeshurs differ in no respect from those of the Skilloots. Like them too, these Eneeshurs are inhospitable and parsimonious, faithless to their engagements, and in the midst of poverty and filth, retain a degree of pride and arrogance which render our numbers our only protection against insult, pillage, and even murder. We are, however, assured by our Chopunnish guide, who appears to be a very sincere, honest Indian, that the nations above will treat us with much more hospitality.
Tuesday 22. Two of our horses broke loose in the night and straggled to some distance, so that we were not able to retake them and begin our march before seven o'clock. We had just reached the top of a hill near the village, when the load of one of the horses turned, and the animal taking fright at a robe which still adhered to him, ran furiously towards the village: just as he came there the robe fell, and an Indian hid it in his hut. Two men went back after the horse which they soon took, but the robe was still missing, and the Indians denied having seen it. These repeated acts of knavery now exhausted our patience, and captain Lewis therefore set out for the village, determined to make them deliver up the robe, or to burn the village to the ground. This disagreeable alternative was rendered unnecessary, for on his way he met one of our men, who had found the robe in an Indian hut hid behind some baggage. We resumed our route, and soon after halted at a hill from the top of which we enjoyed a commanding view of the range of mountains in which mount Hood stands, and which continue south as far as the eye can reach, with their tops covered with snow, mount Hood itself bears south 80º west, and the snowy summit of mount Jefferson south 10º west. Towards the south and at no great distance we discern some woody country, and opposite this point of view is the mouth of the Towahnahooks. This river receives, at the distance of eighteen or twenty miles, a branch from the right, which takes its rise in mount Hood, while the main stream comes in a course from the southeast, and ten or fifteen miles is joined by a second branch from mount Jefferson. From this place we proceeded with our baggage in the centre, escorted both before and behind by those of the men who were without the care of horses, and having crossed a plain eight miles in extent, reached a village of Eneeshurs, consisting of six houses. Here we bought some dogs on which we dined near the village, and having purchased another horse, went up the river four miles further, to another Eneeshur village of seven mat
houses. Our guide now informed us that the next village was at such a distance that we should not reach it this evening, and as we should be able to procure both dogs and wood at this place, we determined to encamp. We here purchased a horse, and engaged for a second in exchange for one of our canoes, but as they were on the opposite side of the river, and the wind very high, they were not able to cross before sunset, at which time the Indian had returned home to the next village above. This evening, as well as at dinner-time, we were obliged to buy wood to cook our meat, for there is no timber in the country, and all the fuel is brought from a great distance. We obtained as much as answered our purposes on moderate terms, but as we are too poor to afford more than a single fire, and lie without any shelter, we find the nights disagreeably cold, though the weather is warm during the daytime.

The next morning, Wednesday 23, two of the horses strayed away in consequence of neglecting to tie them as had been directed. One of them was recovered, but as we had a long ride to make before reaching the next village, we could wait no longer than eleven o'clock for the other. Not being found at that time we set out, and after marching for twelve miles over the sands of a narrow rocky bottom on the north side of the river, came to a village near the Rock rapid at the mouth of a large creek, which we had not observed in descending. It consisted of twelve temporary huts of mat, inhabited by a tribe called Wahhowpum, who speak a language very similar to that of the Chopunnish, whom they resemble also in dress, both sexes being clad in robes and shirts as well as leggings and moccasins. These people seemed much pleased to see us, and readily gave us four dogs and some chapelell and wood in exchange for small articles, such as pewter-buttons, strips of tin, iron, and brass, and some twisted wire, which we had previously prepared for our journey across the plains. These people, as well as some more living in five huts a little below them, were waiting the return
of the salmon. We also found a Chopunnish returning home with his family and a dozen young horses, some of which he wanted us to hire, but this we declined, as in that case we should be obliged to maintain him and his family on the route. After arranging the camp we assembled all the warriors, and having smoked with them, the violins were produced, and some of the men danced. This civility was returned by the Indians in a style of dancing such as we had not yet seen. The spectators formed a circle round the dancers, who with their robes drawn tightly round the shoulders, and divided into parties of five or six men, perform by crossing in a line from one side of the circle to the other. All the parties, performers as well as spectators, sang, and after proceeding in this way for some time, the spectators join, and the whole concludes by a promiscuous dance and song. Having finished, the natives retired at our request, after promising to barter horses with us in the morning. The river is by no means so difficult of passage nor obstructed by so many rapids as it was in the autumn, the water being now sufficiently high to cover the rocks in the bed. In the morning,

Thursday 24, we began early to look for our horses, but they were not collected before one o'clock. In the meantime we prepared saddles for three new horses which we purchased from the Wahhowpums, and agreed to hire three more from the Chopunnish Indian who was to accompany us with his family. The natives also had promised to take our canoes in exchange for horses; but when they found that we were resolved on travelling by land, they refused giving us any thing, in hopes that we would be forced to leave them. Disgusted at this conduct, we determined rather to cut them to pieces than suffer these people to enjoy them, and actually began to split them, on which they gave us several strands of beads for each canoe. We had now a sufficient number of horses to carry our baggage, and therefore proceeded wholly by land. At two o'clock we set out, and pass-
ing between the hills and the northern shore of the river, had a difficult and fatiguing march over a road alternately sandy and rocky. At the distance of four miles, we came to four huts of the Meteowwee tribe, two miles further the same number of huts, and after making twelve miles from our last night's camp halted at a larger village of five huts of Meteowwees.

As we came along many of the natives passed and re-passed without making any advances to converse, though they behaved with distant respect. We observed in our route no animals except the killdeer, the brown lizard, and a moonax, which the people had domesticated as a favourite. Most of the men complain of a soreness in their feet and legs, occasioned by walking on rough stones and deep sands, after being accustomed for some months past to a soft soil. We therefore determined to remain here this evening, and for this purpose bought three dogs and some chapelell, which we cooked with dry grass and willow boughs. The want of wood is a serious inconvenience, on account of the coolness of the nights, particularly when the wind sets from mount Hood, or in any western direction: those winds being much colder than the winds from the Rocky mountains. There are no dews in the plains, and from the appearance, we presume, that no rain has fallen for several weeks. By nine o'clock the following morning, Friday 25, we collected our horses and proceeded eleven miles to a large village of fifty-one mat houses, where we purchased some wood and a few dogs, on which we made our dinner. The village contained about seven hundred persons of a tribe called Pishquitpah, whose residence on the river is only during the spring and summer, the autumn and winter being passed in hunting through the plains, and along the borders of the mountains. The greater part of them were at a distance from the river as we descended, and never having seen white men before, they flocked round us in great numbers; but although they were exceedingly curious
they treated us with great respect, and were very urgent that we should spend the night with them. Two principal chiefs were pointed out by our Chopunnish companion, and acknowledged by the tribe, and we therefore invested each of them with a small medal. We were also very desirous of purchasing more horses; but as our principal stock of merchandise consists of a dirk, a sword, and a few old clothes, the Indians could not be induced to traffic with us. The Pishquitpahs are generally of a good stature and proportion, and as the heads of neither males nor females are so much flattened as those lower down the river, their features are rather pleasant. The hair is braided in the manner practised by their western neighbours; but the generality of the men are dressed in a large robe, under which is a shirt reaching to the knees, where it is met by long leggings, and the feet covered with moccasins: others, however, wear only the truss and robe. As they unite the occupations of hunting and fishing life, both sexes ride very dexterously, their caparison being a saddle or pad of dressed skin, stuffed with goats' hair, and from which wooden stirrups are suspended; and a hair rope tied at both ends to the under jaw of the animal.

The horses, however, though good, suffer much, as do in fact all Indian horses, from sore backs. Finding them not disposed to barter with us, we left the Pishquitpahs at four o'clock, accompanied by eighteen, or twenty of their young men on horseback. At the distance of four miles, we passed, without halting, five houses belonging to the Wollawollahs; and five miles further, observing as many willows as would answer the purpose of making fires, availed ourselves of the circumstance, by encamping near them. The country through which we passed bore the same appearance as that of yesterday. The hills on both sides of the river are about two hundred and fifty feet high, generally abrupt and eraggy, and in many places presenting a perpendicular face of black, hard, and solid rock. From the top of these hills,
the country extends itself in level plains to a very great distance, and though not as fertile as the land near the falls, produces an abundant supply of low grass, which is an excellent food for horses. This grass must indeed be unusually nutritious, for even at this season of the year, after wintering on the dry grass of the plains, and being used with greater severity than is usual among the whites, many of these horses are perfectly fat, nor have we, indeed, seen a single one who was poor. In the course of the day we killed several rattlesnakes, like those of the United States, and saw many of the common as well as the horned-lizard. We also killed six ducks, one of which proved to be of a different species from any we had yet seen, being distinguished by yellow legs, and feet webbed like those of the duckinmallard. The Pishquitpahs passed the night with us, and at their request, the violin was played, and some of the men amused themselves with dancing. At the same time we succeeded in obtaining two horses at nearly the same prices which had already been refused in the village. In the morning,

Saturday 26, we set out early. At the distance of three miles, the river hills become low, and retiring to a great distance, leave a low, level, extensive plain, which on the other side of the river, had begun thirteen miles lower. As we were crossing this plain, we were overtaken by several families travelling up the river with a number of horses, and although their company was inconvenient, for the weather was warm, the roads dusty, and their horses crowded in and broke our line of march, yet we were unwilling to displease the Indians by any act of severity. The plain possesses much grass and a variety of herbaceous plants and shrubs; but after going twelve miles, we were fortunate enough to find a few willows, which enabled us to cook a dinner of jerked elk, and the remainder of the dogs purchased yesterday. We then went on sixteen miles further, and six miles above our camp of the nineteenth of October.
campaigned in the rain, about a mile below three houses of Wollawollahs. Soon after we halted, an Indian boy took a piece of bone, which he substituted for a fish-hook, and caught several chub, nine inches long.

Sunday, 27. We were detained till nine o'clock, before a horse, which broke loose in the night, could be recovered. We then passed, near our camp, a small river, called Youmalolam, proceeded through a continuation, till at the distance of fifteen miles, the abrupt and rocky hills three hundred feet high, return to the river. These we ascended, and then crossed a higher plain for nine miles, when we again came to the water side. We had been induced to make this long march because we had but little provisions, and hoped to find a Wollawollah village, which our guide had told us we should reach when next we met the river. There was, however, no village to be seen, and as both the men and horses were fatigued, we halted, and collecting some dry stalks of weeds and the stems of a plant resembling southern wood, cooked a small quantity of jerked meat for dinner. Soon after we were joined by seven Wollawollahs, among whom we recognised a chief by the name of Yellept, who had visited us on the nineteenth of October, when we gave him a medal with the promise of a larger one on our return. He appeared very much pleased at seeing us again, and invited us to remain at his village three or four days, during which he would supply us with the only food they had, and furnish us with horses for our journey. After the cold, inhospitable treatment we have lately received, this kind offer was peculiarly acceptable, and after a hasty meal, we accompanied him to his village, six miles above, situated on the edge of the low country, and about twelve miles below the mouth of Lewis's river. Immediately on our arrival, Yellept, who proved to be a man of much influence, not only in his own, but in the neighbouring nations, collected the inhabitants, and after having made an harangue, the purport of which was to induce the nations to
treat us hospitably, set them an example, by bringing himself an armful of wood, and a platter containing three roasted mullets. They immediately assented to one part, at least of the recommendation, by furnishing us with an abundance of the only sort of fuel they employ, the stems of shrubs growing in the plains. We then purchased four dogs, on which we supped heartily, having been on short allowance for two days past. When we were disposed to sleep, the Indians retired immediately on our request, and indeed, uniformly conducted themselves with great propriety. These people live on roots, which are very abundant in the plains, and catch a few salmon-trout; but at present they seem to subsist chiefly on a species of mullet, weighing from one to three pounds. They now informed us that opposite to the village, there was a route which led to the mouth of the Kooskooskee, on the south side of Lewis's river, that the road itself was good, and passed over a level country, well supplied with water and grass, and that we should meet with plenty of deer and antelope. We knew that a road in that direction would shorten the distance at least eighty miles, and as the report of our guide was confirmed by Yellept and other Indians, we did not hesitate to adopt that course; they added, however, that there were no houses or permanent residence of Indians on the road, and it was therefore deemed prudent not to trust wholly to our guns, but to lay in a stock of provisions. In the morning,

Monday, 28, therefore we purchased ten dogs. While this trade was carrying on by our men, Yellept brought a fine white horse, and presented him to captain Clarke, expressing at the same time, a wish to have a kettle; but on being informed that we had already disposed of the last kettle we could spare, he said he would be content with any present we should make in return. Captain Clarke therefore gave his sword, for which the chief had before expressed a desire, adding one hundred balls, some powder, and other small articles, with which he appeared perfectly satisfied.
We were now anxious to depart, and requested Yellept to lend us canoes for the purpose of crossing the river. But he would not listen to any proposal of leaving the village. He wished us to remain two or three days; but would not let us go to-day, for he had already sent to invite his neighbours, the Chimnapoos, to come down this evening and join his people in a dance for our amusement. We urged, in vain, that by setting out sooner, we would the earlier return with the articles they desired; for a day, he observed, would make but little difference. We at length mentioned, that as there was no wind, it was now the best time to cross the river, and would merely take the horses over, and return to sleep at their village. To this he assented, and we then crossed with our horses, and having hobbled them, returned to their camp. Fortunately there was among these Wollawollahs, a prisoner belonging to a tribe of Shoshonee or Snake Indians, residing to the south of the Multnomah, and visiting occasionally the heads of the Wollawollah creek. Our Shoshonee woman, Saeajaweah, though she belonged to a tribe near the Missouri, spoke the same language as this prisoner, and by their means we were able to explain ourselves to the Indians, and answer all their inquiries with respect to ourselves and the object of our journey. Our conversation inspired them with much confidence, and they soon brought several sick persons, for whom they requested our assistance. We splintered the broken arm of one, gave some relief to another, whose knee was contracted by rheumatism, and administered what we thought beneficial for ulcers and eruptions of the skin, on various parts of the body, which are very common disorders among them. But our most valuable medicine was eye-water, which we distributed, and which, indeed, they required very much: the complaint of the eyes, occasioned by living on the water, and increased by the fine sand of the plains, being now universal.
A little before sunset, the Chimnapoos, amounting to one hundred men, and a few women, came to the village, and joining the Wollawollahs, who were about the same number of men, formed themselves in a circle round our camp, and waited very patiently till our men were disposed to dance, which they did for about an hour, to the tune of the violin. They then requested to see the Indians dance. With this they readily complied, and the whole assemblage, amounting, with the women and children of the village, to several hundred, stood up, and sang and danced at the same time. The exercise was not, indeed, very violent nor very graceful, for the greater part of them were formed into a solid column, round a kind of hollow square, stood on the same place, and merely jumped up at intervals, to keep time to the music. Some, however, of the more active warriors, entered the square, and danced round it sidewise, and some of our men joined in the dance, to the great satisfaction of the Indians. The dance continued till ten o'clock. The next morning,

Tuesday 29, Yellept supplied us with two canoes in which we crossed with all our baggage by eleven o'clock, but the horses having strayed to some distance, we could not collect them in time to reach any fit place to encamp if we began our journey, as night would overtake us before we came to water. We therefore thought it advisable to encamp about a mile from the Columbia, on the mouth of the Wollawollah river. This is a handsome stream, about fifty yards wide, and four and a half feet in depth: its waters, which are clear, roll over a bed composed principally of gravel, intermixed with some sand and mud, and though the banks are low they do not seem to be overflowed. It empties into the Columbia, about twelve or fifteen miles from the entrance of Lewis's river, and just above a range of high hills crossing the Columbia. Its sources, like those of the Towahnahiooks, Lapage, Youmalolam, and Wollawollah, come, as the Indians inform us, from the north side of a range of mountains which
we see to the east and southeast, and which, commencing to the south of Mount Hood, stretch in a northeastern direction to the neighbourhood of a southern branch of **Lewis's river**, at some distance from the Rocky mountains. Two principal branches however of the **Towahnahooks** take their rise in Mount Jefferson and Mount Hood, which in fact appear to separate the waters of the **Multnomah** and Columbia. They are now about sixty-five or seventy miles from this place, and although covered with snow, do not seem high. To the south of these mountains the Indian prisoner says there is a river, running towards the northwest, as large as the Columbia at this place, which is nearly a mile. This account may be exaggerated, but it serves to show that the Multnomah must be a very large river, and that with the assistance of a **southeastern branch of Lewis's river**, passing round the eastern extremity of that chain of mountains in which Mounts Hood and Jefferson are so conspicuous, waters the vast tract of country to the south, till its remote sources approach those of the Missouri and Rio del Norde.

Near our camp is a fish-weir, formed of two curtains of small willow switches, matted together with wythes of the same plant, and extending across the river in two parallel lines, six feet asunder. These are supported by several parcels of poles, in the manner already described, as in use among the Shoshonees, and are either rolled up or let down at pleasure for a few feet, so as either to suffer the fish to pass or detain them. A seine of fifteen or eighteen feet in length is then dragged down the river by two persons, and the bottom drawn up against the curtain of willows. They also employ a smaller seine like a scooping net, one side of which is confined to a semicircular bow five feet long, and half the size of a man's arm, and the other side is held by a strong rope, which being tied at both ends to the bow, forms the chord to the semicircle. This is used by one person, but the only fish which they can take at this time is a mullet of from four to five pounds in weight, and this is the chief subsist-
ence of a village of twelve houses of Wollawollahs, a little below us on this river, as well as of others on the opposite side of the Columbia. In the course of the day we gave small medals to two inferior chiefs, each of whom made us a present of a fine horse. We were in a poor condition to make an adequate acknowledgment for this kindness, but gave several articles, among which was a pistol, with some hundred rounds of ammunition. We have indeed been treated by these people with an unusual degree of kindness and civility. They seem to have been successful in their hunting during the last winter, for all of them, but particularly the women, are much better clad than when we saw them last; both sexes among the Wollawollahs, as well as the Chimnapoos, being provided with good robes, moccasins, long shirts, and leggings. Their ornaments are similar to those used below, the hair cut in the forehead, and queues falling over the shoulders in front of the body: some have some small plaits at the earlocks, and others tie a bundle of the docked foretop in front of the forehead.

They were anxious that we should repeat our dance of last evening, but as it rained a little and the wind was high, we found the weather too cold for such amusement.

Wednesday 30. Although we had hobbled and secured our new purchases, we found some difficulty in collecting all our horses. In the meantime we purchased several dogs, and two horses, besides exchanging one of our least valuable horses for a very good one belonging to the Chopunnish who is accompanying us with his family. The daughter of this man is now about the age of puberty, and being incommoded by the disorder incident to that age, she is not permitted to associate with the family, but sleeps at a distance from her father's camp, and on the route always follows at some distance alone. This delicacy or affectation is common to many nations of Indians, among whom a girl in that state is separated from her family, and forbidden to use any article of the household or kitchen furniture, or to engage in any oc-
cupation. We have now twenty-three horses, many of whom are young and excellent animals, but the greater part of them are afflicted with sore backs. The Indians in general are cruel masters; they ride very hard, and as the saddles are so badly constructed that it is almost impossible to avoid wounding the back, yet they continue to ride when the poor creatures are scarified in a dreadful manner. At eleven o’clock we left these honest, worthy people, accompanied by our guide and the Chopunnish, family, and directed our course north 30º east, across an open level sandy plain, unbroken except by large banks of pure sand, which have drifted in many parts of the plain to the height of fifteen or twenty feet. The rest of the plain is poor in point of soil, but throughout is generally short grass interspersed with aromatic shrubs, and a number of plants, the roots of which supply the chief sustenance of the natives. Among these we observe a root something like the sweet potatoe. At the distance of fourteen miles we reached a branch of Wollawollah river, rising in the same range of mountains, and empties itself six miles above the mouth of the latter. It is a bold deep stream, about ten yards wide, and seems to be navigable for canoes. The hills of this creek are generally abrupt and rocky, but the narrow bottom is very fertile, and both possess twenty times as much timber as the Columbia itself; indeed, we now find, for the first time since leaving Rockfort, an abundance of firewood. The growth consists of cotton-wood, birch, the crimson haw, red and sweet willow, chokecherry, yellow currants, gooseberry, the honeysuckle with a white berry, rosebushes, sevenbark, sumac, together with some corn-grass and rushes. The advantage of a comfortable fire induced us, as the night was come, to halt at this place. We were soon supplied by Drewyer with a beaver and an otter, of which we took only a part of the beaver, and gave the rest to the Indians. The otter is a favourite food, though much inferior, at least in our estimation, to the dog, which they will not eat. The horse too is seldom eaten, and never
except when absolute necessity compels them to eat it, as the only alternative to prevent their dying of hunger. This fastidiousness does not, however, seem to proceed so much from any dislike to the food, as from attachment to the animal itself, for many of them eat very heartily of the horse-beef which we give them. At an early hour in the morning, Thursday, May 1, 1805, we collected our horses, and after breakfast set out about seven o'clock, and followed the road up the creek. The low grounds and plains presented the same appearance as that of yesterday, except that the latter were less sandy. At the distance of nine miles, the Chopunnish Indian, who was in front, pointed out an old unbeaten road to the left, which he informed us was our shortest route. Before venturing, however, to quit our present road, which was level, and not only led us in the proper direction, but was well supplied with wood and water, we halted to let our horses graze till the arrival of our other guide, who happened to be at some distance behind. On coming up he seemed much displeased with the other Indian, and declared that the road we were pursuing was the proper one; that if we decided on taking the left road, it would be necessary to remain till to-morrow morning, and then make an entire day's march before we could reach either water or wood. To this the Chopunnish assented, but declared that he himself meant to pursue that route, and we therefore gave him some powder and lead which he requested.

Four hunters whom we had sent out in the morning, joined us while we halted, and brought us a beaver for dinner. We then took our leave of the Chopunnish at one o'clock, and pursued our route up the creek, through a country similar to that we had passed in the morning. But at the distance of three miles, the hills on the north side became lower, and the bottoms of the creek widened into a pleasant country, two or three miles in extent. The timber too, is now more abundant, and our guide tells us that we shall not want either wood or game from this place as far
Up the Missouri.

as the Kooskooskee. We have already seen a number of deer, of which we killed one, and observed great quantities of the curlew, as well as some cranes, ducks, prairie larks, and several species of sparrow, common to the prairies. There is, in fact, very little difference in the general face of the country here from that of the plains on the Missouri, except that the latter are enlivened by vast herds of buffalo, elk and other animals, which give it an additional interest. Over these wide bottoms we continued on a course north, 75° east, till, at the distance of seventeen miles from where we dined, and twenty-six from our last encampment, we halted for the night. We had scarcely encamped, when three young men came up from the Wollawollah village, with a steel trap, which had been left behind inadvertently, and which they had come a whole day's journey in order to restore. This act of integrity was the more pleasing, because, though very rare among Indians, it corresponds perfectly with the general behaviour of the Wollawollahs, among whom we had lost carelessly several knives, which were always returned as soon as found. We may, indeed, justly affirm, that of all the Indians whom we have met since leaving the United States, the Wollawollahs were the most hospitable, honest and sincere.
CHAPTER XL

The party still pursue their route towards the Kooskooskee on horseback with Wollawollah guides—character of the country—the quash and other flowering shrubs in bloom—the party reach the Kinnoochim creek—they meet with an old acquaintance called the Bighorn Indian—they arrive at the mouth of the Kooskooskee—singular custom among the Chopunnish women—difficulty of purchasing provisions from the natives, and the new resort of the party to obtain them—the Chopunnish style of architecture—captain Clarke turns physician, and performs several experiments with success upon the natives, which they reward—an instance of their honesty—the distress of the Indians for want of provisions during the winter—the party finally meet the Twistedhair, to whom was entrusted their horses during their journey down—the quarrel between that chief and another of his nation, on the subject of his horses—the causes of this controversy stated at large—the two chiefs reconciled by the interference of the party, and the horses restored—extraordinary instance of Indian hospitality towards strangers—a council held with the Chopunnish, and the object of the expedition explained in a very circuitous route of explanation—the party again perform medical cures—the answer of the Chopunnish to the speech delivered at the council, confirmed by a singular ceremony of acquiescence—they promise faithfully to follow the advice of their visiters.

Friday, May 2. We despatched two hunters ahead; but the horse we had yesterday purchased from the Chopunnish, although closely hobbled, contrived to break loose in the night, and went back to rejoin his companions. He was however overtaken and brought to us about one o'clock, and we then set forward. For three miles we followed a hilly road on the north side of the creek, opposite to a wide bottom, where a branch falls in from the southwest mountains, which, though covered with snow, are about twenty-five miles distant, and do not appear high. We then entered an extensive level bottom, with about fifty acres of land well covered with pine near the creek, and the long-leafed pine
occasionally on the sides of the hills along its banks. After crossing the creek at the distance of seven miles from our camp, we repassed it seven miles further, near the junction of one of its branches from the northeast. The main stream here bears to the south, towards the mountains where it rises, and its bottoms then become narrow, as the hills are higher. We followed the course of this northeast branch in a direction N. 45º E. for eight and three quarter miles, when having made nineteen miles, we halted in a little bottom on the north side. The creek is here about four yards wide, and as far as we can perceive, it comes from the east, but the road here turns from it into the high open plain. The soil of the country seems to improve as we advance, and this afternoon we see, in the bottoms, an abundance of quamash now in bloom. We killed nothing but a duck, though we saw two deer at a distance, as well as many sandhill crows, curlews, and other birds common to the prairies, and there is much sign of both beaver and otter, along the creeks. The three young Wolla-wollahs continued with us. During the day we observed them eating the inner part of the young succulent stem of a plant very common in the rich lands on the Mississippi, Ohio and its branches. It is a large coarse plant, with a ternate leaf, the leaflets of which are three-lobed, and covered with a woolly pubescence, while the flower and fructification resemble that of the parsnip. On tasting this plant, we found it agreeable, and eat heartily of it without any inconvenience.

Saturday, 3. We set out at an early hour, and crossed the high plains, which we found more fertile and less sandy than below; yet, though the grass is taller, there are very few aromatic shrubs. After pursuing a course N. 25º E. for twelve miles, we reached the Kinnooenim. This creek rises in the southwest mountains, and though only twelve yards wide, discharges a considerable body of water into Lewis's river, a few miles above the narrows. Its bed is pebbled,
its banks low, and the hills near its sides high and rugged; but in its narrow bottoms are found some cottonwood, willow, and the underbrush, which grows equally on the east branch of the Wollawollah. After dining at the Kinnooenim, we resumed our journey over the high plains, in the direction of N. 45º E. and reached, at the distance of three miles, a small branch of that creek about five yards wide. The lands in its neighbourhood are composed of a dark rich loam; its hill sides, like those of the Kinnooenim, are high, its bottoms narrow, and possess but little timber. It increased however in quantity as we advanced along the north side of the creek for eleven miles. At that distance we were agreeably surprised by the appearance of Weahkoonut, or the Indian whom we had called the Bighorn, from the circumstance of his wearing a horn of that animal, suspended from his left arm. He had gone down with us last year along Lewis's river, and was highly serviceable in preparing the minds of the natives for our reception. He is, moreover, the first chief of a large band of Chopunnish; and hearing that we were on our return, he had come with ten of his warriors to meet us. He now turned back with us, and we continued up the bottoms of the creek for two miles, till the road began to leave the creek, and cross the hill to the plains. We therefore encamped for the night in a grove of cottonwood, after we had made a disagreeable journey of twenty-eight miles. During the greater part of the day the air was keen and cold, and it alternately rained, hailed and snowed; but, though the wind blew with great violence, it was fortunately from the southwest, and on our backs. We had consumed at dinner the last of our dried meat, and nearly all that was left of the dogs; so that we supped very scantily on the remainder, and had nothing for to-morrow. Weahkoonut, however, assured us that there was a house on the river at no great distance, where we might supply ourselves with provisions. We now missed our guide and the Wollawollahs, who left us abruptly this morning, and never
returned. After a disagreeable night, we collected our horses at an early hour,

Sunday, 4, and proceeded with a continuation of the same weather. We are now nearer to the southwest mountains, which appear to become lower as they advance towards the northeast. We followed the road over the plains, north 60° east, for four miles to a ravine, where was the source of a small creek, down the hilly and rocky sides of which we proceeded for eight miles to its entrance into Lewis's river, about seven miles and a half above the mouth of the Kooskooskee. Near this place we found the house of which Weahkoonut had mentioned, and where we now halted for breakfast. It contained six families, but so miserably poor that all we could obtain from them were two lean dogs and a few large cakes of half cured bread, made of a root resembling the sweet potatoe, of all which we contrived to form a kind of soup. The soil of the plain is good, but it has no timber. The range of southwest mountains is about fifteen miles above us, but continues to lower, and is still covered with snow to its base. After giving a passage to Lewis's river, near their northeastern extremity, they terminate in a high level plain between that river and the Kooskooskee. The salmon not having yet called them to the rivers, the greater part of the Chopunnish are now dispersed in villages through this plain, for the purpose of collecting quamash and cows, which here grow in great abundance, the soil being extremely fertile, and in many places covered with the long-leaved pine, the larch, and balsam-fir, which contribute to render it less thirsty than the open unsheltered plains. After our repast we continued our route along the west side of the river, where as well as on the opposite shore, the high hills approach it closely, till at the distance of three miles we halted opposite to two houses: the inhabitants consisted of five families of Chopunnish, among whom were Tetoh, or Sky, the younger of the two chiefs who accompanied us in the autumn to the great falls.
of the Columbia, and also our old pilot who had conducted us down the river to the Columbia. They both advised us to cross here, and ascend the Kooskooskee on the northeast side, this being the shortest and best route to the forks of that river, where we should find the Twistedhair, in whose charge we left our horses, and to which place they promised to show us the way. We did not hesitate to accept this offer, and therefore crossed with the assistance of three canoes; but as the night was coming on, we purchased a little wood and some roots of cows, and encamped, though we had made only fifteen miles to-day. The evening proved cold and disagreeable, and the natives crowded round our fire in such numbers that we could scarcely cook or even keep ourselves warm. At these houses of Chopunnish we observed a small hut with a single fire, which we are informed is appropriated for women who are undergoing the operation of the menses; there they are obliged to retreat; the men are not permitted to approach within a certain distance of them, and when any thing is to be conveyed to those deserted females, the person throws it to them forty or fifty paces off, and then retires. It is singular, indeed, that amongst the nations of the wilderness, there should be found customs and rites so nearly resembling those of the Jews. It is scarcely necessary to allude more particularly to the uncleanness of Jewish females and the rites of purification.

Monday 5. We collected our horses, and at seven o'clock set forward alone; for Weahkoonut, whose people resided above on the west side of Lewis's river, continued his route homeward when we crossed to the huts. Our road was across the plains for four and a half miles, to the entrance of the Kooskooskee. We then proceeded up that river, and at five miles reached a large mat house, but could not procure any provisions from the inhabitants, but on reaching another three miles beyond, we were surprised at the liberality of an Indian, who gave captain Clarke a very elegant
Up the Missouri.

gray mare, for which, all he requested was a phial of eye-water. Last autumn, while we were encamped at the mouth of the Chopunnish river, a man who complained of a pain in his knee and thigh, was brought to us in hopes of receiving relief. The man was to appearance recovered from his disorder, though he had not walked for some time. But that we might not disappoint them, captain Clarke, with much ceremony, washed and rubbed his sore limb, and gave him some volatile liniment to continue the operation, which either caused, or rather did not prevent his recovery. The man gratefully circulated our praises, and our fame as physicians was increased by the efficacy of some eye-water which we gave them at the same time. We are by no means displeased at this new resource for obtaining subsistence, as they will give us no provisions without merchandise, and our stock is now very much reduced: we cautiously abstain from giving them any but harmless medicines, and as we cannot possibly do harm, our prescriptions, though unsanctioned by the faculty, may be useful, and are entitled to some remuneration. Four miles beyond this house we came to another large one, containing ten families, where we halted, and made our dinner on two dogs and a small quantity of roots, which we did not procure without much difficulty. Whilst we were eating, an Indian standing by, and looking with great derision at our eating dogs, threw a poor half-starved puppy almost into captain Lewis's plate, laughing heartily at the humour of it. Captain Lewis took up the animal and flung it with great force into the fellow's face, and seizing his tomahawk, threatened to cut him down if he dared to repeat such insolence. He immediately withdrew, apparently much mortified, and we continued our repast of dog very quietly. Here we met our old Chopunnish guide, with his family, and soon afterwards one of our horses, which had been separated from the rest in the charge of the Twistedhair, and been in this neighbourhood for several weeks, was caught and restored to us. After dinner we pro-
ceeded to the entrance of Colter's creek, at the distance of four miles, and having made twenty and a half miles, encamped on the lower side of it. Colter's creek rises not far from the Rocky mountains, and passing in the greater part of its course through a country well supplied with pine, discharges a large body of water. It is about twenty-five yards wide, with a pebbled bed and low banks. At a little distance from us are two Chopunnish houses, one of which contains eight families, and the other, which is by much the largest we have ever seen, inhabited by at least thirty. It is rather a kind of shed, built like all the other huts, of straw and mats in the form of the roof of a house, one hundred and fifty-six feet long, and about fifteen wide, closed at the ends, and having a number of doors on each side. The vast interior is without partitions, but the fire of each family is kindled in a row along the middle of the building, and about ten feet apart. This village is the residence of one of the principal chiefs of the nation, who is called Neeshnepahkeook, or Cutnose, from the circumstance of having his nose out from the stroke of a lance in battle with the Snake Indians. We gave him a small medal, but though he is a great chief, his influence among his own people does not seem to be considerable, and his countenance possesses very little intelligence. We arrived very hungry and weary, but could not purchase any provisions, except a small quantity of the roots and bread of the cows. They had, however, heard of our medical skill, and made many applications for assistance, but we refused to do any thing unless they gave us either dogs or horses to eat. We had soon nearly fifty patients. A chief brought his wife with an abcess on her back, and promised to furnish us with a horse to-morrow if we would relieve her. Captain Clarke, therefore, opened the abcess, introduced a tent, and dressed it with basilicon. We prepared also, and distributed some doses of the flour of sulphur and cream of tarter, with directions for its use. For these we obtained several dogs, but too poor for use,
and we therefore postponed our medical operations till the morning. In the meantime a number of Indians, beside the residents of the village, gathered about us or encamped in the woody bottom of the creek.

In the evening, we learnt by means of a Snake Indian, who happens to be at this place, that one of the old men has been endeavouring to excite prejudices against us, by observing that he thought we were bad men, and came here, most probably, for the purpose of killing them. In order to remove such impressions, we made a speech, in which, by means of the Snake Indian, we told them our country and all the purposes of our visit. While we were engaged in this occupation, we were joined by Weahkoonut, who assisted us in effacing all unfavourable impressions from the minds of the Indians. The following morning,

Tuesday 6, our practice became more valuable. The woman declared that she had slept better than at any time since her illness. She was therefore dressed a second time, and her husband, according to promise, brought us a horse, which we immediately killed. Besides this woman, we had crowds of other applicants, chiefly afflicted with sore eyes, and after administering to them for several hours, found ourselves once more in possession of a plentiful meal, for the inhabitants began to be more accommodating, and one of them even gave us a horse for our remedies to his daughter, a little girl, who was afflicted with the rheumatism. We moreover, exchanged one of our horses with Weahkoonut, by the addition of a small flag, which procured us an excellent sorrel horse. We here found three men, of a nation called Skeetsomish, who reside at the falls of a large river, emptying itself into the north side of the Columbia. This river takes its rise from a large lake in the mountains, at no great distance from the falls where these natives live. We shall designate this river, hereafter, by the name of Clarke’s river, as we do not know its Indian appellation, and we are the first whites who have
ever visited its principal branches; for the Great Lake river mentioned by Mr. Fidler, if at all connected with Clarke's river, must be a very inconsiderable branch. To this river, moreover, which we have hitherto called Clarke's river, which rises in the southwest mountains, we restored the name of Towahnahiooks, the name by which it is known to the Eneeshurs. In dress and appearance these Skeetsomish were not to be distinguished from the Chopunnish, but their language is entirely different, a circumstance which we did not learn till their departure, when it was too late to procure from them a vocabulary.

About two o'clock we collected our horses and set out, accompanied by Weahkoonut, with ten or twelve men, and a man who said he was the brother of the Twistedhair. At four miles we came to a single house of three families, but we could not procure provisions of any kind; and five miles further we halted for the night near another house, built like the rest, of sticks, mats and dried hay, and containing six families. It was now so difficult to procure anything to eat that our chief dependence was on the horse which we received yesterday for medicine; but to our great disappointment, he broke the rope by which he was confined, made his escape, and left us supperless in the rain. The next morning,

Wednesday 7, Weahkoonut and his party left us, and we proceeded up the river with the brother of the Twistedhair as a guide. The Kooskooskee is now rising fast, the water is clear and cold, and as all the socks and shoals are now covered, the navigation is safe, notwithstanding the rapidity of the current. The timber begins about the neighbourhood of Colter's creek, and consists chiefly of long-leafed pine. After going four miles, we reached a house of six families, below the entrance of a small creek, where our guide advised us to cross the river, as the route was better, and the game more abundant near the month of the Chopun-
We therefore unloaded, and by means of a single canoe, passed to the south side in about four hours, during which time we dined. An Indian of one of the houses now brought two canisters of powder, which his dog had discovered under ground in a bottom some miles above. We immediately knew them to be the same we had buried last autumn, and as he had kept them safely, and had honesty enough to return them, we rewarded him inadequately, but as well as we could, with a steel for striking fire. We set out at three o'clock, and pursued a difficult and stony road for two miles, when we left the river and ascended the hills on the right, which begin to resemble mountains. But when we reached the heights, we saw before us a beautiful level country, partially ornamented with the long-leaved pine, and supplied with an excellent pasture of thick grass, and a variety of herbaceous plants, the abundant productions of a dark rich soil. In many parts of the plain, the earth is thrown up into little mounds, by some animal, whose habits most resemble those of the salamander; but although these tracks are scattered over all the plains from the Mississippi to the Pacific, we have never yet been able to obtain a sight of the animal itself.

As we entered the plain Neeshnepahkee, the Cutnose, overtook us, and after accompanying us a few miles, turned to the right to visit some of his people, who were now gathering roots in the plain. Having crossed the plain a little to the south of east, we descended a long steep hill, at the distance of five miles, to a creek six yards wide, which empties itself into the Kooskooskee. We ascended this little stream for a mile, and encamped at an Indian establishment of six houses, which seem to have been recently evacuated. Here we were joined by Neeshnepahkee, and the Shoshonee who had interpreted for us on the fifth.

From the plain we observed that the spurs of the Rocky mountains are still perfectly covered with snow, which the Indians inform us is so deep that we shall not be able to pass...
before the next full moon, that is, the first of June: though others place the time for crossing at a still greater distance. To us, who are desirous of reaching the plains of the Missouri, if for no other reason, for the purpose of enjoying a good meal, this intelligence was by no means welcome, and gave no relish to the remainder of the horse killed at Colter’s creek, which formed our supper, part of which had already been our dinner. Observing, however, some deer, and a great appearance of more, we determined to make an attempt to get some of them, and therefore, after a cold night’s rest.

Thursday, 8, most of the hunters set out at daylight. By eleven o’clock they all returned, with four deer, and a duck of an uncommon kind, which, with the remains of our horse, formed a stock of provisions such as we had not lately possessed. Without our facilities of procuring subsistence with guns, the natives of this country must often suffer very severely. During last winter they were so much distressed for food, that they were obliged to boil and eat the moss growing on the pine trees. At the same period they cut down nearly all the long-leafed pines, which we observed on the ground, for the purpose of collecting its seed, which resemble in size and shape that of the large sunflower, and when roasted or boiled, is nutritious and not disagreeable to the taste. At the present season they peal this pine tree, and eat the inner and succulent bark. In the creek near us, they also procure trout by means of a falling trap, constructed on the same plan with those common to the United States. We gave Neeshnepahkee and his people some of our game and horse-beef, besides the entrails of the deer, and four fawns which we found inside of two of them. They did not eat any of it perfectly raw, but the entrails had very little cooking, and the fawns were boiled whole, and the hide, hair, and entrails all consumed. The Shoshonee was offended at not having as much venison as he wished, and refused to interpret; but as we took no notice of him, he became very officious in the course of a few hours, and
made many efforts to reinstate himself in our favour. The
mother of the Twistedhair, and Neeshnepahkeeook now
drew a sketch, which we preserved, of all the waters west
of the Rocky mountains. They make the main southern
branch of Lewis’s river, much more extensive than the other,
and place a great number of Shoshonee villages on its west-
ern side. Between three and four o’clock in the afternoon
we set out, in company with Neeshnepahkeeook and other
Indians, the brother of the Twistedhair having left us. Our
route was up a high steep hill to a level plain, with little
wood, through which we passed in a direction parallel to the
river, for four miles, when we met the Twistedhair and six
of his people. To this chief we had confided our horses and
a part of our saddles, last autumn, and we therefore formed
very unfavourable conjectures on finding that he received
us with great coldness. Shortly after he began to speak in
a very loud, angry manner, and was answered by Neeshnep-
ahkeeook. We now discovered that a violent quarrel had
arisen between these chiefs, on the subject, as we afterwards
understood, of our horses. But as we could not learn the
cause, and were desirous of terminating the dispute, we in-
terposed, and told them we should go on to the first water
and encamp. We therefore set out, followed by all the In-
dians, and having reached, at two miles distance, a small
stream, running to the right, we encamped with the two
chiefs and their little bands, forming separate camps, at a
distance from each other. They all appeared to be in an ill
humour, and as we had already heard reports that the In-
dians had discovered and carried off our saddles, and that the
horses were very much scattered, we began to be uneasy,
lest there should be too much foundation for the report. We
were therefore anxious to reconcile the two chiefs as soon
as possible, and desired the Shoshonee to interpret for us,
while we attempted a mediation; but he peremptorily refu-
sed to speak a word: he observed that it was a quarrel be-
 tween the two chiefs, and he had therefore no right to inter-
fere; nor could all our representations, that by merely repea-
ting what we said, he could not possibly be considered as
meddling between the chiefs, induce him to take any part
in it. Soon afterwards Drewyer returned from hunting and
was sent to invite the Twistedhair to come and smoke with
us. He accepted the invitation, and as we were smoking
the pipe over our fire, he informed us, that according to his
promise, on leaving us at the falls of the Columbia, he had
collected our horses and taken charge of them, as soon as
he had reached home: But about this time Neeshnepah-
keeeooks and Tunnachemootoolt (the Brokenarm) who,
as we passed, had been on a war party against the Shoshonees
on the south branch of Lewis's river, returned, and becoming
jealous of him, because the horses had been confided to his
care, were constantly quarrelling with him. At length, be-
ing an old man, and unwilling to live in perpetual dispute
with the two chiefs, he had given up the care of the horses,
which had consequently become very much scattered. The
greater part of them were, however, still in this neighbour-
hood; some in the forks between the Chopunnish and Koos-
kooskee, and three or four at the village of the Brokenarm,
about half a day's march higher up the river. He added,
that on the rise of the river in the spring, the earth had
fallen from the door of the cache and exposed the saddles,
some of which had probably been lost; but as soon as he was
acquainted with the situation of them, he had them buried in
another deposit, where they now are. He now promised that
if we would stay to-morrow at his house, a few miles from
this place, he would collect such of the horses as were in the
neighbourhood, and send his young men for those in the forks
over the Kooskooskee. He moreover advised us to visit the
Brokenarm, who was a chief of great eminence, and that he
would himself guide us to his dwelling. We told him that
we meant to follow his advice in every respect; that we had
confided our horses to his charge, and expected that he would
deliver them to us, on which we should willingly pay him the
two guns and ammunition, as we had promised. With this he seemed very much pleased, and declared that he would use every exertion to restore our horses. We now sent for the Cutnose, and after smoking for some time, took occasion to express to the two chiefs, our regret at seeing a misunderstanding between them. Neeshnepahkecook told us that the Twistedhair was a bad old man, and wore two faces; for instead of taking care of our horses, he had suffered his young men to hunt with them, so that they had been very much injured, and that it was for this reason that the Brokenarm and himself had forbidden him to use them. The Twistedhair made no reply to this speech, after which we told Neeshnepahkecook of our arrangement for to-morrow. He appeared very well satisfied, and said that he would himself go with us to the Brokenarm, who expected that we would see him, and who had two bad horses for us, an expression by which was meant that he intended making us a present of two valuable horses. That chief, he also informed us, had been apprised of our want of provisions, and sent four young men to meet us with a supply; but having taken a different road, they had missed us. After this interview we retired to rest at a late hour, and in the morning, Friday 9, after sending out several hunters, we proceeded through a level rich country, similar to that of yesterday, for six miles, when we reached the house of the Twistedhair, situated near some larch trees, and a few bushes of balsam fir. It was built in the usual form, of sticks, mats, and dried hay; and although it contained no more than two fires and twelve persons, was provided with the customary appendage of a small hut, to which females in certain situations were to retreat. As soon as we halted at this place, we went with the Twistedhair to the spot where he had buried our saddles, and two other young Indians were despatched after the horses. Our hunters joined us with nothing but a few pheasants, the only deer which they killed being lost in the river. We therefore dined on soup, made of the roots
of cows, which we purchased of the Indians. Late in the afternoon, the Twistedhair returned with about half the saddles we had left in the autumn, and some powder and lead which was buried at the same place. Soon after, the Indians brought us twenty-one of our horses, the greater part of whom were in excellent order, though some had not yet recovered from hard usage, and three had sore backs. We were however very glad to procure them in any condition. Several Indians came down from the village of Tunnachemootoolt, and passed the night with us. The Cutnose and Twistedhair seem now perfectly reconciled, for they both slept in the house of the latter. The man who had imposed himself upon us as a brother of the Twistedhair, also came and renewed his advances, but we now found that he was an impertinent proud fellow, of no respectability in the nation, and we therefore felt no inclination to cultivate his intimacy. Our camp was in an open plain, and soon became very uncomfortable, for the wind was high and cold, and the rain and hail which began about seven o’clock, changed in about two hours to a heavy fall of snow, which continued till after six o’clock

Saturday, 10, the next morning, when it ceased, after covering the ground eight inches deep, and leaving the air keen and cold. We soon collected our horses, and after a scanty breakfast of roots, set out on a course S. 35° E. across the plains, the soil of which being covered with snow, we could only judge from observing that near the ravines, where it had melted, the mud was deep, black, and well supplied with quamash. The road was very slippery, and the snow stuck to the horses’ feet and made them slip down very frequently. After going about sixteen miles, we came to the hills of Commearp creek, which are six hundred feet in height, but the tops of which only are covered with snow, the lower parts as well as the bottoms of the creek having
had nothing but rain while it snowed in the high plains. On descending these hills to the creek, we reached about four o'clock, the house of Tunnachemootoolt, where was displayed the flag which we had given him, raised on a staff: under this we were received with due form, and then conducted a short distance to a good spot for an encampment, on Commearp creek. We soon collected the men of consideration, and after smoking, explained how destitute we were of provisions. The chief spoke to the people, who immediately brought about two bushels of dried quamash roots, some cakes of the roots of cows, and a dried salmon trout: we thanked them for this supply, but observed that, not being accustomed to live on roots alone, we feared that such diet might make our men sick, and therefore proposed to exchange one of our good horses, which was rather poor, for one that was fatter, and which we might kill. The hospitality of the chief was offended at the idea of an exchange; he observed that his people had an abundance of young horses, and that if we were disposed to use that food, we might have as many as we wanted. Accordingly, they soon gave us two fat young horses, without asking any thing in return, an act of liberal hospitality much greater than any we have witnessed since crossing the Rocky mountains, if it be not in fact the only really hospitable treatment we have received in this part of the world. We killed one of the horses, and then telling the natives that we were fatigued and hungry, and that as soon as we were refreshed, we would communicate freely with them, began to prepare our repast. During this time, a principal chief, called Hohastillpilp, came from his village about six miles distant, with a party of fifty men, for the purpose of visiting us. We invited him into our circle, and he alighted and smoked with us, while his retinue, who had five elegant horses, continued mounted at a short distance. While this was going on, the chief had a large leathern tent spread for us, and desired that we would make that our home whilst we
remained at his village. We removed there, and having made a fire, and cooked a supper of horse-beef and roots, collected all the distinguished men present, and spent the evening in explaining who we were, the objects of our journey, and giving answers to their inquiries. To each of the chiefs, Tunnachemootoolt, and Hohastilpilp, we gave a small medal, explaining their use and importance, as honorary distinctions both among the whites and red men. Our men are delighted at once more having made a hearty meal. They have generally been in the habit of crowding the houses of the Indians, and endeavouring to purchase provisions on the best terms they could; for the inhospitality of the country was such, that in the extreme of hunger they were often obliged to treat the natives with but little ceremony, but this the Twistedhair had told us was disagreeable. Finding that these people are so kind and liberal, we ordered our men to treat them with great respect and not to throng round their fires, so that they now agree perfectly well together. After our council, the Indians felt no disposition to retire, and our tent was crowded with them all night. The next morning,

Sunday 11, we arose early and breakfasted again on horse-flesh. This village of Tunnachemootoolt, is in fact only a single house, one hundred and fifty feet long, built after the Chopunnish fashion, with sticks, straw, and dried grass. It contains twenty four fires, about double that number of families, and might perhaps muster one hundred fighting men. The usual outhouse, or retiring hut for females, is not omitted. Their chief subsistence is roots, and the noise made by the women in pounding them, gives the hearer the idea of a nail factory. Yet, notwithstanding so many families are crowded together, the Chopunnish are much more cleanly in their persons and habitations, than any people we have met since we left the Ottoes on the river Platte. In the course of the morning, a chief named Yoompahkatim, a stout good looking man, of about forty years of age,
who had lost his left eye, arrived from his village on the south side of Lewis’s river. We gave him a small medal, and finding that there were now present the principal chiefs of the Chopunnish nation, Tunnachemootoolt (the Broken-arm) Neeshnepahkeecook, Yoompahkatim, and Hohastilpilp, whose rank is in the order they are mentioned, we thought this a favourable moment to explain to them the intentions of our government. We therefore collected the chiefs and warriors, and having drawn a map of the relative situation of our country, on a mat, with a piece of coal, detailed the nature and power of the American nation, its desire to preserve harmony between all its red brethren, and its intention of establishing trading houses for their relief and support. It was not without difficulty, nor till after nearly half the day was spent, that we were able to convey all this information to the Chopunnish, much of which might have been lost or distorted, in its circuitous route through a variety of languages; for in the first place, we spoke in English to one of our men, who translated it into French to Chaboneau; he interpreted it to his wife in the Minnetaree language, and she then put it into Shoshonee, and the young Shoshonee prisoner explained it to the Chopunnish in their own dialect. At last we succeeded in communicating the impression they wished, and then adjourned the council; after which we amused them by showing the wonders of the compass, the spy-glass, the magnet, the watch and air-gun, each of which attracted its share of admiration. They said that after we had left the Minnetarees last autumn, three young Chopunnish had gone over to that nation, who had mentioned our visit and the extraordinary articles we had with us, but they placed no confidence in it until now. Among other persons present, was a youth, son of the Chopunnish chief, of much consideration, killed not long since by the Minnetarees of Fort de Prairie. As soon as the council was over, he brought a very fine mare with a colt, and begged us to accept them as a proof that he meant to
pursue our advice, for he had opened his ears to our coun-
cils, which had made his heart glad. We now resumed our
medical labours, and had a number of patients afflicted with
scrophula, rheumatism and sore eyes, to all which we ad-
ministered very cheerfully as far as our skill and supplies
of medicine would permit. We also visited a chief who has
for three years past so completely lost the use of his limbs,
that he lies like a perfect corpse in whatever position he is
placed, yet he eats heartily, digests his food very well, has
a regular pulse, and retains his flesh; in short, were he not
somewhat pale from lying so long out of the sun, he
might be mistaken for a man in perfect health. This dis-
ease does not seem to be common; indeed, we have seen only
three cases of it among the Chopunnish, who alone are af-
licted with it. The scrophulous disorders we may readily
conjecture to originate in the long confinement to vegetable
diet; which may perhaps also increase the soreness of the
eyes; but this strange disorder baffles at once our curiosity
and our skill. Our assistance was again demanded early the
next morning,

Monday 12, by a crowd of Indians, to whom we gave eye-
water. Shortly after, the chiefs and warriors held a coun-
cil among themselves, to decide on the answer to our speech;
and the result was, as we were informed, that they confided
in what we had told them, and resolved to follow our advice.
This resolution once made, the principal chief, Tunnach-
moootoolt, took a quantity of flour of the roots of cows, and
going round to all the kettles and baskets, in which his peo-
ple were cooking, thickened the soup into a kind of mush.
He then began a harangue, making known the result of
the deliberations among the chiefs, and after exhorting
them to unanimity, concluded by an invitation to all who
agreed to the proceedings of the council, to come and eat,
while those who would not abide by the decision of the chiefs
were requested to show their dissent by not partaking in
the feast. During this animated harangue, the women,
who were probably uneasy at the prospect of forming this new connexion with strangers, tore their hair, and wrung their hands with the greatest appearance of distress. But the concluding appeal of the orator effectually stopped the mouths of every malcontent, and the proceedings were ratified, and the mush devoured with the most zealous unanimity. The chiefs and warriors then came in a body to visit us, as we were seated near our tent, and at their instance, two young men, one of whom was the son of Tunnachemootoolt, and the other the youth whose father had been killed by the Pahkees, presented to each of us a fine horse. We caused the chiefs to be seated, and gave every one of them a flag, a pound of powder, and fifty balls, and a present of the same kind to the young men from whom we had received the horses. They then invited us into the tent, and told us that they now wished to answer what we had told them yesterday; but that many of their people were at that moment waiting in great pain for our medical assistance. It was therefore agreed that captain Clarke, who is the favourite physician, should visit the sick, while captain Lewis would hold the council; which was accordingly opened by an old man, the father of Hohastilpilp. He began by declaring that the nation had listened with attention to our advice, and had only one heart and one tongue in declaring their determination to follow it. They knew well the advantages of peace, for they valued the lives of their young men too much to expose them to the dangers of war; and their desire to live quietly with their neighbours, had induced them last summer to send three warriors with a pipe to the Shoshonees, in the plains of Columbia, south of Lewis's river. These ministers of peace had been killed by the Shoshonees, against whom the nation immediately took up arms. They had met them last winter, and killed forty-two men, with the loss of only three of their own party; so that having avenged their deceased brethren, they would no longer make war on the Shoshonees, but receive them as friends. As to
going with us to the plains of the Missouri, they would be very willing to do so, for though the Blackfoot Indians and the Pahkees had shed much of their blood, they still wished to live in peace with them. But we had not yet seen either of these nations, and it would therefore be unsafe for them to venture, till they were assured of not being attacked by them. Still, however, some of their young men would accompany us across the mountains, and if they could effect a peace with their enemies, the whole nation would go over to the Missouri in the course of next summer. On our proposal that one of the chiefs should go with us to the country of the whites, they had not yet decided, but would let us know before we left them. But that, at all events, the whites might calculate on their attachment and their best services, for though poor, their hearts were good. The snow was, however, still so deep on the mountains, that we should perish in attempting the passage, but if we waited till after the next full moon, the snows would have sufficiently melted to enable our horses to subsist on the grass. As soon as this speech was concluded, captain Lewis replied at some length: with this they appeared highly gratified, and after smoking the pipe, made us a present of another fat horse for food. We, in turn, gave the Brokenarm a phial of eye-water, with directions to wash the eyes of all who should apply for it; and as we promised to fill it again when it was exhausted, he seemed very much pleased with our liberality. To the Twistedhair, who had last night collected six more horses, we gave a gun, an hundred balls, and two pounds of powder, and told him he should have the same quantity when we received the remainder of our horses. In the course of the day three more of them were brought in, and a fresh exchange of small presents put the Indians in excellent humour. On our expressing a wish to cross the river, and form a camp, in order to hunt and fish till the snows had melted, they recommended a position a few miles distant, and promised to furnish us to-morrow with a canoe to cross,
We invited the Twistedhair to settle near our camp, for he has several young sons, one of whom we hope to engage as a guide, and he promised to do so. Having now settled all their affairs, the Indians divided themselves into two parties, and began to play the game of hiding a bone, already described, as common to all the natives of this country, which they continued playing for beads and other ornaments.
CHAPTER XII.

The party encamp amongst the Chopunnish, and receive further evidences of their hospitality—the Indian mode of boiling bears-flesh—of gelding horses—their mode of decoying the deer within reach of their arrows—character of the soil and climate in the Rocky mountains—varieties of climate—character of the natives—their dress and ornaments—mode of burying the dead—the party administer medical relief to the natives—one of the natives restored to the use of his limbs by sweating, and the curious process by which perspiration was excited—another proof of Chopunnish hospitality—success of their sweating prescription on the Indian chief—description of the horned lizard, and a variety of insects—the attachment of the friends of a dying Indian to a tomahawk which he had stolen from the party, and which they desired to bury with the body—description of the river Tommanamah—the Indians return an answer to a proposition made by the party.

Tuesday, 13. Our medical visits occupied us till a late hour, after which we collected our horses and proceeded for two miles in a southeastern direction, crossing a branch from the right, at the distance of a mile. We then turned nearly north, and crossing an extensive open bottom, about a mile and a half wide, reached the bank of the Kooskooskee. Here we expected the canoe which they had promised; but although a man had been despatched with it at the appointed time, he did not arrive before sunset. We therefore encamped, with a number of Indians who had followed us from the village, and in the morning,

Wednesday 14, after sending out some hunters, transported the baggage by means of the canoe, and then drove our horses into the river, over which they swam without accident, although it is one hundred and fifty yards wide, and the current very rapid. We then descended the river about
half a mile, and formed our camp on the spot which the Indians had recommended. It was about forty paces from the river, and formerly an Indian habitation; but nothing remained at present but a circle thirty yards in diameter, sunk in the ground about four feet, with a wall round it of nearly three and a half feet in height. In this place we deposited our baggage, and round its edges formed our tents of sticks and grass. This situation is in many respects advantageous. It is an extensive level bottom, thinly covered with long leafed pine, with a rich soil, affording excellent pasture, and supplied, as well as the high and broken hills on the east and northeast, with the best game in the neighbourhood, while its vicinity to the river makes it convenient for the salmon, which are now expected daily. As soon as we had encamped, Tunnachemootoolt and Hohastilpilp, with about twelve of their nation, came to the opposite side and began to sing, this being the usual token of friendship on similar occasions. We sent the canoe for them, and the two chiefs came over with several of the party, among whom were the two young men who had given us the two horses in behalf of the nation. After smoking some time, Hohastilpilp presented to captain Lewis an elegant gray gelding, which he had brought for the purpose, and was perfectly satisfied at receiving in return a handkerchief, two hundred balls, and four pounds of powder.

The hunters killed some pheasants, two squirrels, and a male and a female bear, the first of which was large and fat, and of a bay colour; the second meagre, grisly, and of smaller size. They were of the species common to the upper part of the Missouri, and might well be termed the variegated bear, for they are found occasionally of a black grisly brown or red colour. There is every reason to believe them to be of precisely the same species. Those of different colours are killed together, as in the case of these two, and we found the white and bay associated together on the Missouri; and some nearly white were seen in this neigh-
hood by the hunters. Indeed, it is not common to find any two bears of the same colour, and if the difference in colour were to constitute a distinction of species, the number would increase to almost twenty. Soon after they killed a female bear with two cubs. The mother was black, with a considerable intermixture of white hairs and a white spot on the breast. One of the cubs was jet black, and the other of a light reddish brown, or bay colour. The foil of these variegated bears, are much finer, longer, and more abundant than that of the common black bear: but the most striking difference between them is, that the former are larger, have longer tusks, and longer as well as blunter talons; that they prey more on other animals; that they lie neither so long nor so closely in winter quarters, and never climb a tree, however closely pressed by the hunters. This variegated bear, though specifically the same with those we met on the Missouri, are by no means so ferocious, probably, because of the scarcity of game, and the habit of living on roots may have weaned them from the practices of attacking and devouring animals. Still, however, they are not so passive as the common black bear, which are also to be found here; for they have already fought with our hunters, though with less fury than those on the other side of the mountain.

A large part of the meat we gave to the Indians, to whom it was a real luxury, as they scarcely taste flesh once in a month. They immediately prepared a large fire of dried wood, on which were thrown a number of smooth stones from the river. As soon as the fire went down, and the stones were heated, they were laid next to each other, in a level position, and covered with a quantity of branches of pine, on which were placed flitches of the bear, and thus placing the boughs and flesh alternately for several courses, leaving a thick layer of pine on the top. On this heap was then poured a small quantity of water, and the whole covered with earth to the depth of four inches. After remaining in this state about three hours, the meat was taken off, and was
really more tender than that which we had boiled or roasted, though the strong flavour of the pine, rendered it disagreeable to our palates. This repast gave them much satisfaction, for though they sometimes kill the black bear, yet they attack very reluctantly the furious variegated bear, and only when they can pursue him on horseback, through the plains, and shoot him with arrows.

The stone horses we found so troublesome that we have endeavoured to exchange them for either mares or geldings; but although we offered two for one, they were unwilling to barter. It was therefore determined to castrate them; and being desirous of ascertaining the best method of performing this operation, two were gelded in the usual manner, while one of the natives tried the experiment in the Indian way, without tying the string of the stone (which he assured us was much the better plan) and carefully scraping the string clean and separating it from the adjoining veins before cutting it. All the horses recovered; but we afterwards found that those on which the Indian mode had been tried, although they bled more profusely at first, neither swell nor appear to suffer as much as the others, and recovered sooner, so that we are fully persuaded that the Indian method is preferable to our own.

May 15. As we shall now be compelled to pass some time in this neighbourhood, a number of hunters were sent in different directions, and the rest were employed in completing the camp. From this labour we, however, exempted five of the men, two of whom are afflicted with cholic, and the others complain of violent pains in the head, all which are occasioned, we presume, by the diet of roots, to which they have recently been confined. We secured the baggage with a shelter of grass, and made a kind of bower of the under part of an old sail, the leathern tent being now too rotten for use, while the men formed very comfortable huts in the shape of the awning of a wagon, by means of willow poles and grass. Tunnachemootoolt and his young men left.
us this morning on their way home; and soon after we were visited by a party of fourteen Indians on horseback, armed with bows and arrows going on a hunting excursion. The chief game is the deer, and whenever the ground will permit, the favourite hunt is on horseback; but in the woodlands, where this is impracticable, they make use of a decoy. This consists of the skin of the head and upper part of the neck of a deer, kept in its natural shape by a frame of small sticks on the inside. As soon as the hunter perceives a deer he conceals himself, and with his hand moves the decoy so as to represent a real deer in the act of feeding, which is done so naturally that the game is seduced within reach of their arrows.

We also exercised our horses by driving them together, so as to accustom them to each other, and incline them the less to separate. The next morning, Friday 16, an Indian returned with one of them, which had strayed away in the night to a considerable distance, an instance of integrity and kindness by no means singular among the Chopunnish. Hohastilpilp, with the rest of the natives left us to-day. The hunters who have as yet come in, brought nothing, except a few pheasants, so that we still place our chief reliance on the mush made of roots (among these the cows and the quamash are the principal) with which we use a small onion, which grows in great abundance, and which corrects any bad effects they may have on the stomach. The cows and quamash, particularly, incline to produce flatulency, to obviate which we employ a kind of fennel, called by the Shoshonees, yearhah, resembling aniseed in flavour, and a very agreeable food.

In the course of the day two other hunters brought in a deer. The game they said was scarce; but they had wounded three bear as white as sheep. The last hunters who had left us yesterday, also came in to-night, with information, that at the distance of five or six miles, they attempted to cross Collins's creek, on the other side, where game is
most abundant, but that they could not ford it with their horses, on account of its depth, and the rapidity of the current.

Saturday, 17, It rained during the greater part of the night, and our flimsy covering being insufficient for our protection, we lay in the water most of the time. What was more unlucky, our chronometer became wet, and, in consequence, somewhat rusty, but by care we hope to restore it. The rain continued nearly the whole day, while on the high plains the snow is falling, and already two or three inches in depth. The bad weather confined us to the camp and kept the Indians from us, so that for the first time since we left the narrows of the Columbia, a day has passed without our being visited by any of the natives.

The country along the Rocky mountains for several hundred miles in length and about fifty wide, is a high level plain; in all its parts extremely fertile, and in many places covered with a growth of tall long-leafed pine. This plain is chiefly interrupted near the streams of water, where the hills are steep and lofty; but the soil is good, being unincumbered by much stone, and possess more timber than the level country. Under shelter of these hills, the bottom lands skirt the margin of the rivers, and though narrow and confined, are still fertile and rarely inundated. Nearly the whole of this wide spread tract is covered with a profusion of grass and plants, which are at this time as high as the knee. Among these are a variety of esculent plants and roots, acquired without much difficulty, and yielding not only a nutritious, but a very agreeable food. The air is pure and dry, the climate quite as mild, if not milder, than the same parallels of latitude in the Atlantic states, and must be equally healthy, for all the disorders which we have witnessed, may fairly be imputed more to the nature of the diet than to any intemperance of climate. This general observation is of course to be qualified, since in the same tract of country, the degrees of the combination of heat and cold obey the influence of situa-
tion. Thus the rains of the low grounds near our camp, are snows in the high plains, and while the sun shines with intense heat in the confined bottoms, the plains enjoy a much colder air, and the vegetation is retarded at least fifteen days, while at the foot of the mountains the snows are still many feet in depth; so that within twenty miles of our camp we observe the rigours of winter cold, the cool air of spring, and the oppressive heat of midsummer. Even on the plains, however, where the snow has fallen, it seems to do but little injury to the grass and other plants, which, though apparently tender and susceptible, are still blooming, at the height of nearly eighteen inches through the snow. In short, this district affords many advantages to settlers, and if properly cultivated, would yield every object necessary for the subsistence and comfort of civilized man.

The Chopunnish themselves are in general stout, well formed, and active; they have high, and many of them aquiline noses, and the general appearance of the face is cheerful and agreeable, though without any indication of gayety and mirth. Like most of the Indians they extract their beards; but the women only pluck the hair from the rest of the body. That of the men is very often suffered to grow, nor does there appear to be any natural deficiency in that respect; for we observe several men, who, if they had adopted the practice of shaving, would have been as well supplied as ourselves. The dress of both sexes resembles that of the Shoshonees, and consists of a long shirt reaching to the thigh, leggings as high as the waist, moccasins and robes, all of which are formed of skins.

Their ornaments are beads, shells, and pieces of brass attached to different parts of the dress, or tied round the arms, neck, wrists, and over the shoulders: to these are added pearls and beads, suspended from the ears, and a single shell of wampum through the nose. The head-dress of the men is a bandeau of fox or otter skin, either with or without the fur, and sometimes an ornament is tied to a
plait of hair, falling from the crown of the head: that of the women is a cap without rim, formed of bear grass and cedar bark; while the hair itself, of both sexes, falls in two rows down the front of the body. Collars of bears' claws are also common. But the personal ornament most esteemed is a sort of breastplate, formed of a strip of otter skin, six inches wide, cut out of the whole length of the back of the animal, including the head; this being dressed with the hair on, a hole is made at the upper end, through which the head of the wearer is placed, and the skin hangs in front with the tail reaching below the knee, and ornamented with pieces of pearl, red cloth, and wampum; or, in short, any other fanciful decoration. Tippets also are occasionally worn. That of Hohastilpilp was formed of human scalps, and adorned with the thumbs and fingers of several men slain by him in battle.

The Chopunnish are among the most amiable men we have seen. Their character is placid and gentle, rarely moved into passion, yet not often enlivened by gayety. Their amusements consist in running races, shooting with arrows at a target, and they partake of the great and prevailing vice of gambling. They are, however, by no means so much attached to baubles as the generality of Indians, but are anxious to obtain articles of utility, such as knives, tomahawks, kettles, blankets, and awls for moccasins. They have also suffered so much from the superiority of their enemies, that they are equally desirous of procuring arms and ammunition, which they are gradually acquiring, for the band of Tunnachemootoolt have already six guns, which they acquired from the Minnetarees.

The Chopunnish bury their dead in sepulchres, formed of boards, constructed like the roof of a house. The body is rolled in skins and laid one over another, separated by a board only, both above and below. We have sometimes seen their dead buried in wooden boxes, and rolled in skins in the manner above mentioned. They sacrifice their horses,
canoes, and every other species of property to their dead; the bones of many horses are seen lying round their sepulchres.

Among the reptiles common to this country are the two species of innocent snakes already described, and the rattle-snake, which last is of the same species as that of the Missouri, and though abundant here, is the only poisonous snake we have seen between the Pacific and the Missouri. Besides these there are the common black lizard and horned lizard. Of frogs there are several kinds, such as the small green tree frog, the small frog common in the United States, which sings in the spring of the year, a species of frog frequenting the water, much larger than the bull-frog, and in shape between the delicate length of the bull-frog, and the shorter and less graceful form of the toad like; the last of which, however, its body is covered with little pustules, or lumps: we have never heard it make a noise of any kind. Neither the toad bull-frog; the moccasin-snake, nor the copperhead-snake are to be found here. Captain Lewis killed a snake near the camp three feet and eleven inches in length, and much the colour of the rattlesnake. There was no poisonous tooth to be found. It had two hundred and eighteen scuta on the abdomen, and fifty-nine squama or half-formed scuta on the tail. The eye was of a moderate size: the iris of a dark yellowish brown, and the pupil black. There was nothing remarkable in the form of the head, which was not so wide across the jaws as that of the poisonous class of snakes usually are.

There is a species of lizard, which we have called the horned lizard, about the size and much resembling in figure the ordinary black lizard. The belly is, notwithstanding, broader, the tail shorter, and the action much slower than the ordinary lizard. It crawls like the toad, is of a brown colour, and interspersed with yellowish brown spots; it is covered with minute shells, interspersed with little horny projections like prickles on the upper part of the body. The belly and throat resemble the frogs, and are of a light yellowish
brown. The edge of the belly is regularly beset with these horny projections, which give to those edges a serrate figure; the eye is small and of a dark colour. Above and behind the eyes are several projections of the bone, which being armed at the extremities with a firm black substance, having the appearance of horns sprouting from the head, has induced us to call it the horned lizard. These animals are found in great abundance in the sandy parts of the plains, and after a shower of rain are seen basking in the sun. For the greatest part of the time they are concealed in holes. They are found in great numbers on the banks of the Missouri, and in the plains through which we have passed above the Wollawollahs.

Most of the insects common to the United States are seen in this country: such as the butterfly, the common housefly, the blowingfly, the horsefly, except one species of it, the gold-coloured earfly, the place of which is supplied by a fly of a brown colour, which attaches itself to the same part of the horse, and is equally troublesome. There are likewise nearly all the varieties of beatles known in the Atlantic states, except the large cow beetle, and the black beetle, commonly called the tumblebug. Neither the hornet, the wasp, nor the yellowjacket inhabit this part of the country, but there is an insect resembling the last of these, though much larger, which is very numerous, particularly in the Rocky mountains and on the waters of the Columbia; the body and abdomen are yellow, with transverse circles of black, the head black, and the wings, which are four in number, of a dark brown colour: their nests are built in the ground, and resemble that of the hornet, with an outer covering to the comb. These insects are fierce, and sting very severely, so that we found them very troublesome in frightening our horses as we passed the mountains. The silkworm is also found here, as well as the humble-bee, though the honey-bee is not.
May 18. Twelve hunters set out this morning after the bear, which are now our chief dependence; but as they are now ferocious, the hunters henceforward never go except in pairs. Soon after they left us, a party of Chopunnish erected a hut on the opposite side of the river in order to watch the salmon, which is expected to arrive every day. For this purpose they have constructed with sticks, a kind of wharf, projecting about ten feet into the river, and three feet above its surface, on the extremity of which one of the fishermen exercised himself with a scooping net, similar to that used in our country; but after several hours' labour he was still unsuccessful. In the course of the morning three Indians called at our camp and told us that they had been hunting near the place where we met the Chopunnish last autumn, and which is called by them the quamash grounds, but after roaming about for several days had killed nothing. We gave them a small piece of meat, which they said they would keep for their small children, which they said were very hungry, and then, after smoking, took leave of us. Some of our hunters returned almost equally unsuccessful. They had gone over the whole country between Collins's creek and the Kooskooskee, to their junction, at the distance of ten miles, without seeing either a deer or bear, and at last brought in a single hawk and a salmon dropped by an eagle. This last was not in itself considerable, but gave us hopes of soon seeing that fish in the river, an event which we ardently desire, for though the rapid rise of the river denotes a great decrease of snow on the mountains, yet we shall not be able to leave our camp for some time.

Monday, 19. After a cold rainy night, during a greater part of which we lay in the water, the weather became fair, and we then sent some men to a village above us, on the opposite side, to purchase some roots. They carried with them for this purpose a small collection of alls, knitting pins, and armbands, with which they obtained several bushels of the root of cows, and some bread of the same mate-
rial. They were followed too by a train of invalids from the village, who came to ask for our assistance. The men were generally afflicted with sore eyes, but the women had besides this a variety of other disorders, chiefly rheumatic, a violent pain and weakness in the loins, which is a common complaint among the females, and one of them seemed much dejected, and as we thought, from the account of her disease, hysterical. We gave her thirty drops of laudanum, and after administering eye-water and rubbing the rheumatic patients with volatile liniment, and giving cathartics to others, they all thought themselves much relieved, and returned highly satisfied to the village. We were fortunate enough to retake one of the horses on which we crossed the Rocky mountains in the autumn, and which had become almost wild since that time.

Tuesday, 20. Again it rained during the night, and the greater part of this day. Our hunters were out in different directions, but though they saw a bear and a deer or two, they only killed one of the latter, which proved to be of the muledeer species. The next day,

Wednesday 21, finding the rain still continue we left our ragged sail tent, and formed a hut with willow poles and grass. The rest of the men were occupied in building a canoe for present use, as the Indians promise to give us a horse for it when we leave them. We received nothing from our hunters except a single sandhill crane, which are very abundant in this neighbourhood, and consumed at dinner the last morsel of meat which we have. As there now seems but little probability of our procuring a stock of dried meat, and the fish is as yet an uncertain resource, we made a division of all our stock of merchandise, so as to enable the men to purchase a store of roots and bread for the mountains. We might ourselves collect those roots, but as there are several species of hemlock growing among the cows, and difficult to be distinguished from that plant, we are afraid to suffer the men to collect them, lest the party might be poisoned.
by mistaking them. On parcelling out the stores, the stock of each man was found to consist of only one awl and one knitting-pin, half an ounce of vermilion, two needles, a few skeins of thread, and about a yard of riband—a slender means of bartering for our subsistence; but the men have been now so much accustomed to privations, that neither the want of meat, nor the scanty funds of the party, excite the least anxiety among them.

Thursday, 22. We availed ourselves of the fair weather to dry our baggage and store of roots, and being still without meat, killed one of our colts, intending to reserve the other three for the mountains. In the afternoon we were amused by a large party of Indians, on the opposite side of the river, hunting on horseback. After riding at full speed down the steep hills, they at last drove the deer into the river, where we shot it, and two Indians immediately pursued it on a raft, and took it. Several hunters, who had gone to a considerable distance near the mountains, returned with five deer. They had purchased also two red salmon trout, which the Indians say remain in this river during the greater part of the winter, but are not good at this season, as it in fact appeared, for they were very meagre. The salmon, we understand, are now arrived at no great distance, in Lewis's river, but some days will yet elapse before they come up to this place. This, as well as the scarcity of game, made us wish to remove lower down; but on examination we found that there was no place in that direction calculated for a camp, and therefore resolved to remain in our present position. Some uneasiness has been excited by a report, that two nights ago a party of Shoshonees had surrounded a Chopunnish house, on the south side of Lewis's river, but the inhabitants having discovered their intentions, had escaped without injury.

Friday, 23. The hunters were sent out to make a last effort to procure provisions, but after examining the whole country between Collins's creek and the Kooskooskee, they
found nothing except a few pheasants of the dark brown kind. In the meantime we were visited by four Indians who had come from a village on Lewis's river, at the distance of two days' ride, who came for the purpose of procuring a little eye-water: the extent of our medical fame is not a little troublesome, but we rejoice at any circumstance which enables us to relieve these poor creatures, and therefore willingly washed their eyes, after which they returned home.

Saturday, 24. This proved the warmest day we have had since our arrival here. Some of our men visited the village of the Brokenarm, and exchanged some awls, which they had made of the links of a small chain belonging to one of their steel traps, for a plentiful supply of roots.

Besides administering medical relief to the Indians, we are obliged to devote much of our time to the care of our own invalids. The child of Sacajawea is very unwell; and with one of the men we have ventured an experiment of a very robust nature. He has been for some time sick, but has now recovered his flesh, eats heartily and digests well, but has so great a weakness in the loins that he cannot walk nor even sit upright without extreme pain. After we had in vain exhausted the resources of our art, one of the hunters mentioned that he had known persons in similar situations restored by violent sweats, and at the request of the patient, we permitted the remedy to be applied. For this purpose, a hole about four feet deep and three in diameter was dug in the earth, and heated well by a large fire in the bottom of it. The fire was then taken out, and an arch formed over the hole by means of willow poles, and covered with several blankets, so as to make a perfect awning. The patient being stripped naked, was seated under this on a bench, with a piece of board for his feet, and with a jug of water sprinkled the bottom and sides of the hole, so as to keep up as hot a steam as he could bear. After remaining twenty minutes in this situation, he was taken out, immediately plunged twice in cold water, and brought back
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to the hole, where he resumed the vapour bath. During all this time he drank copiously a strong infusion of horse-mint, which was used as a substitute for the seneca root, which our informant said he had seen employed on these occasions, but of which there is none in this country. At the end of three quarters of an hour, he was again withdrawn from the hole, carefully wrapped, and suffered to cool gradually. This operation was performed yesterday, and this morning he walked about, and is nearly free from pain. About eleven o'clock a canoe arrived with three Indians, one of whom was the poor creature who had lost the use of his limbs, and for whose recovery the natives seem very anxious, as he is a chief of considerable rank among them. His situation is beyond the reach of our skill. He complains of no pain in any peculiar limb, and we therefore think his disorder cannot be rheumatic, as his limbs would have been more diminished if his disease had been a paralytic affection. We had already ascribed it to his diet of roots, and had recommended his living on fish and flesh, and using the cold bath every morning, with a dose of cream of tarter, or flowers of sulphur, every third day. These prescriptions seem to have been of little avail, but as he thinks himself somewhat better for them, we concealed our ignorance by giving him a few drops of laudanum and a little portable soup, with a promise of sweating him, as we had done our own man. On attempting it however, in the morning,

Sunday 25, we found that he was too weak to sit up or be supported in the hole: we therefore told the Indians that we knew of no other remedy except frequent perspirations in their own sweat-houses, accompanied by drinking large quantities of the decoction of horsemint, which we pointed out to them. Three hunters set out to hunt towards the Quamash flats if they could pass Collins's creek. Others crossed the river for the same purpose, and one of the men was sent to a village on the opposite side, about eight miles above us. Nearly all the inhabitants were either hunting, digging roots, or
fishing in Lewis's river, from which they had brought several fine salmon. In the course of the day, some of our hunters wounded a female bear with two cubs, one of which was white and the other perfectly black.

The Indians who accompanied the sick chief are so anxious for his safety that they remained with us all night, and in the morning, Monday 26, when we gave him some cream of tartar, and portable soup, with directions how to treat him, they still lingered about us in hopes we might do something effectual, though we desired them to take him home.

The hunters sent out yesterday returned with Hohastilpilp, and a number of inferior chiefs and warriors. They had passed Commcarp creek at the distance of one and a half miles, and a larger creek three miles beyond; they then went on till they were stopped by a large creek ten miles above our camp, and finding it too deep and rapid to pass, they returned home. On their way, they stopped at a village four miles up the second creek, which we have never visited, and where they purchased bread and roots on very moderate terms; an article of intelligence very pleasing at the present moment, when our stock of meat is again exhausted. We have however still agreeable prospects, for the river is rising fast, as the snows visibly diminish, and we saw a salmon in the river to-day. We also completed our canoe.

Tuesday 27. The horse which the Indians gave us some time ago, had gone astray; but in our present dearth of provisions we searched for him and killed him. Observing that we were in want of food, Hohastilpilp informed us that most of the horses which we saw running at large belonged to him or his people, and requested that whenever we wished any meat we would make use of them without restraint. We have, indeed, on more than one occasion, had to admire the generosity of this Indian, whose conduct presents a model of what is due to strangers in distress. A party was sent to
the village discovered yesterday, and returned with a large supply of bread and roots. Sergeant Ordway and two men were also despatched to Lewis's river, about half a day's ride to the south, where we expect to obtain salmon, which are said to be very abundant at that place. The three men who had attempted to go to the Quamah flats, returned with five deer; but although they had proceeded some distance up Collins's creek, it continued too deep for them to cross. The Indians who accompanied the chief, were so anxious to have the operation of sweating him performed under our inspection, that we determined to gratify them by making a second attempt. The hole was therefore enlarged, and the father of the chief, a very good looking old man, went in with him, and held him in a proper position. This strong evidence of feeling is directly opposite to the received opinions of the insensibility of savages, nor are we less struck by the kindness and attention paid to the sick man by those who are unconnected with him, which are the more surprising, as the long illness of three years might be supposed to exhaust their sympathy. We could not produce as complete a perspiration as we desired, and after he was taken out, he complained of suffering considerable pain, which we relieved with a few drops of laudanum, and he then rested well. The next morning,

Wednesday 28, he was able to use his arms, and feels better than he has done for many months, and set up during the greater part of the day.

We sent to the village of Tunnachemootolt for bread and roots, and a party of hunters set out to hunt up a creek, about eight miles above us. In the evening, another party, who had been so fortunate as to find a ford across Collins's creek, returned from the Quamah flats with eight deer, of which they saw great numbers, though there were but few bears. Having now a tolerable stock of meat, we were occupied during the following day,
Thursday 29, in various engagements in the camp. The Indian chief is still rapidly recovering, and for the first time during the last twelve months, had strength enough to wash his face. We had intended to repeat the sweating to-day, but as the weather was cloudy, with occasional rain, we declined it. This operation, though violent, seems highly efficacious; for our own man, on whom the experiment was first made, is recovering his strength very fast, and the restoration of the chief is wonderful. He continued to improve, and on the following day,

Friday 30, after a very violent sweating, was able to move one of his legs and thighs, and some of his toes; the fingers and arms being almost entirely restored to their former strength. Parties were sent out as usual to hunt and trade with the Indians. Among others, two of the men who had not yet exchanged their stock of merchandise for roots, crossed the river for that purpose, in our boat. But as they reached the opposite shore, the violence of the current drove the boat broadside against some trees, and she immediately filled and went to the bottom. With difficulty one of the men was saved, but the boat itself, with three blankets, a blanket-coat, and their small pittance of merchandise, were irrevocably lost.

Saturday, 31. Two men visited the Indian village, where they purchased a dressed bear skin, of a uniform pale reddish brown colour, which the Indians called yackah in contradistinction to hohhost, or the white bear. This remark induced us to inquire more particularly into their opinions as to the several species of bears; and we therefore produced all the skins of that animal which we had killed at this place, and also one very nearly white, which we had purchased. The natives immediately classed the white, the deep and the pale grizly red, the grizly dark brown, in short, all those with the extremities of the hair of a white or frosty colour, without regard to the colour of the ground of the foil, under the name of hohhost. They assured us, that
they were all of the same species with the white bear; that they associated together, had longer nails than the others, and never climbed trees. On the other hand, the black skins, those which were black, with a number of entire white hairs intermixed, or with a white breast, the uniform bay, the brown, and light reddish brown, were ranged under the class yackkah, and were said to resemble each other in being smaller, and having shorter nails than the white bear, in climbing trees, and being so little vicious that they could be pursued with safety. This distinction of the Indians seems to be well founded, and we are inclined to believe,

First, That the white or grizly bear of this neighbourhood form a distinct species, which moreover is the same with those of the same colour on the upper part of the Missouri, where the other species are not found.

Second, That the black and reddish brown, &c. is a second species, equally distinct from the white bear of this country, as from the black bear of the Atlantic and Pacific oceans, which two last seem to form only one species. The common black bear are indeed unknown in this country; for the bear of which we are speaking, though in most respects similar, differs from it in having much finer, thicker, and longer hair, with a greater proportion of fur mixed with it, and also in having a variety of colours, while the common black bear has no intermixture or change of colour, but is of a uniform black.

In the course of the day the natives brought us another of our original stock of horses, of which we have now recovered all except two, and those, we are informed, were taken back by our Shoshonee guide, when he returned home. They amount to sixty-five, and most of them fine strong active horses, in excellent order.

Sunday, June 1. Two of our men who had been up the river to trade with the Indians, returned quite unsuccessful. Nearly opposite to the village, their horse fell with his load, down a steep cliff, into the river, across which he swam. An Indian on the opposite side, drove him back to
them, but in crossing most of the articles were lost, and the paint melted. Understanding their intentions, the Indians attempted to come over to them, but having no canoe, were obliged to use a raft, which struck on a rock, upset, and the whole store of roots and bread were destroyed. This failure completely exhausted our stock of merchandise; but the remembrance of what we suffered from cold and hunger during the passage of the Rocky mountains, makes us anxious to increase our means of subsistence and comfort when we again encounter the same inconvenience. We therefore created a new fund, by cutting off the buttons from our clothes, preparing some eye-water, and basilicon, to which were added some phials, and small tin boxes, in which we had once kept phosphorus. With this cargo two men set out in the morning,

Monday 2, to trade, and brought home three bushels of roots and some bread, which, in our situation, was as important as the return of an East India ship. In the meantime, several hunters went across Collins's creek to hunt on the Quamash grounds, and the Indians informed us that there were great quantities of moose to the southeast of the east branch of Lewis's river, which they call the Tommanamah. We had lately heard that some Indians who reside at some distance, on the south side of the Kooskooskee, are in possession of two tomahawks, one of which was left at our camp at Musquiooe creek, the other had been stolen while we were encamped at the Chopunnish last autumn. This last we were anxious to obtain, in order to give to the relations of our unfortunate companion, serjeant Floyd, to whom it once belonged. We therefore sent Drewyer yesterday with Neeshnepahkeeo and Hohastlipilp, the two chiefs, to demand it. On their arrival, it seemed that the present owner, who had purchased it from the thief, was himself at the point of death; so that his relations were unwilling to give it up, as they meant to bury it in the grave with the deceased. But the influence of Neeshnepahkeeoook
at length succeeded; and they consented to surrender the tomahawk on receiving two strands of beads and a handkerchief, from Drewyer, and from each of the chiefs a horse, to be killed at the funeral of the deceased, according to the custom of the country.

Soon after their return, serjeant Ordway and his party, for whose safety we had now become extremely anxious, came home from Lewis’s river, with some roots of cows and seventeen salmon. The distance, however, from which they were brought, was so great, that most of them were nearly spoiled; but such as continued sound, were extremely delicious, the flesh being of a fine rose colour, with a small mixture of yellow, and so fat that they were cooked very well without the addition of any oil or grease.

When they set out on the 27th, they had hoped to reach the salmon fishery in the course of that day, but the route by which the guides led them was so circuitous, that they rode seventy miles before they reached their place of destination, in the evening of the twenty ninth. After going for twenty miles up the Commearp creek, through an open plain, broken only by the hills and timber along the creek, they then entered a high, irregular, mountainous country, the soil of which was fertile, and well supplied with pine. Without stopping to hunt, although they saw great quantities of deer, and some of the bighorn, they hastened for thirty miles across this district to the Tommanamah or east branch of Lewis’s river; and not finding any salmon, descended that stream for twenty miles, to the fishery at a short distance below its junction with the south branch. Both these forks appear to come from or enter a mountainous country. The Tommanamah itself, they said, was about one hundred and fifty yards wide; its banks, for the most part, formed of solid perpendicular rocks, rising to a great height, and as they passed along some of its hills, they found that the snow had not yet disappeared, and the grass was just springing up. During its whole course it presented one
Up the Missouri.

continued rapid, till at the fishery itself, where the river widens to the space of two hundred yards, the rapid is nearly as considerable as at the great rapids of the Columbia. Here the Indians have erected a large house of split timber, one hundred and fifty feet long, and thirty-five wide, with a flat roof; and at this season is much resorted to by the men, while the women are employed in collecting roots. After remaining a day, and purchasing some fish, they returned home.

Tuesday, 3. Finding that the salmon has not yet appeared along the shores, as the Indians assured us they would in a few days, and that all the salmon which they themselves use, are obtained from Lewis's river, we begin to lose our hopes of subsisting on them. We are too poor, and at too great a distance from Lewis's river, to purchase fish at that place, and it is not probable that the river will fall sufficiently to take them before we leave this place. Our Indian friends sent an express to-day over the mountains to Traveller's-rest, in order to procure intelligence from the Ootlashoots, a band of Flatheads who have wintered on the east side of the mountains, and the same band which we first met on that river. As the route was deemed practicable for this express, we also proposed setting out, but the Indians dissuaded us from attempting it, as many of the creeks, they said, were still too deep to be forded; the roads very deep and slippery, and no grass as yet for our horses; but in twelve or fourteen days we shall no longer meet with the same obstacles: we therefore determined to set out in a few days for the Quamash flats, in order to lay in a store of provisions, so as to cross the mountains about the middle of the month.

For the two following days we continued hunting in our own neighbourhood, and by means of our own exertions, and trading with the Indians for trifling articles, succeeded in procuring as much bread and roots, besides other food as will enable us to subsist during the passage of the moun-
tains. The old chief in the meantime gradually recovered
the use of his limbs, and our own man was nearly restored
to his former health. The Indians who had been with us,
now returned, and invited us to their village on the follow-
ing day.

Friday, June 6, to give us their final answer to a num-
ber of proposals which we had made to them. Neeshneh-
pahkeeeook then informed us, that they could not accompa-
ny us, as we wished, to the Missouri; but that in the latter
end of the summer they meant to cross the mountain and
spend the winter to the eastward. We had also request-
ed some of their young men to go with us, so as to effect
a reconciliation between them and the Pahkees, in case
we should meet these last. He answered, that some of their
young men would go with us, but they were not selected for
that purpose, nor could they be until a general meeting of
the whole nation, who were to meet in the plain on Lewis's
river, at the head of Commearp. This meeting would take
place in ten or twelve days, and if we set out before that
time, the young men should follow us. We therefore de-
pend but little on their assistance as guides, but hope to en-
gage for that purpose, some of the Ootlashoots near Trave-
ller's-rest creek. Soon after this communication, which
was followed by a present of dried quamash, we were visited
by Hohastilpilp and several others, among whom were the
two young chiefs who had given us horses some time ago.
CHAPTER XIII.

The party mingle in the diversions of the Willetoos Indians, a tribe hitherto unnoticed—their joy on the prospect of a return—description of the vegetables growing on the Rocky mountains—various preparations made to resume their journey—the party set out, and arrive at Hungry creek—the serious and desponding difficulties that obstructed their progress—they are compelled to return, and to wait for a guide across the mountains—their distress for want of provisions—they resolve to return to the Quamash flats—they are at last so fortunate as to procure Indian guides, with whom they resume their journey to the falls of the Missouri—the danger of the route described—their scarcity of provisions, and the danger of their journey, their course lying along the ridges of the mountains—description of the warm springs, where the party encamp—the fondness of the Indians for bathing in them.

Saturday, June 7, 1806. The two young chiefs returned after breakfast to their village on Commearp creek, accompanied by several of our men, who were sent to purchase ropes and bags for packing, in exchange for some parts of an old seine, bullets, old files, and pieces of iron. In the evening they returned with a few strings but no bags. Ho-hastilpilp crossed the river in the course of the day, and brought with him a horse, which he gave one of our men who had previously made him a present of a pair of Canadian shoes or shoepacks. We were all occupied in preparing packs and saddles for our journey; and as we intend to visit the Quamash flats on the tenth, in order to lay in a store of provisions for the journey over the mountains, we do not suffer the men to disturb the game in that neighbourhood.

Sunday, 8. The Cutnose visited us this morning with ten or twelve warriors: among these were two belonging to a band of Chopunnish, which we had not yet seen, who call themselves Willetpos, and reside on the south side of Lewis's...
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One of them gave a good horse, which he rode, in exchange for one of ours, which was unable to cross the mountain, on receiving a tomahawk in addition. We were also fortunate in exchanging two other horses of inferior value for others much better, without giving any thing else to the purchaser. After these important purchases, several foot races were run between our men and the Indians: the latter, who are very active, and fond of these races, proved themselves very expert, and one of them was as fleet as our swiftest runners. After the races were over, the men divided themselves into two parties and played prison bass, an exercise which we are desirous of encouraging, before we begin the passage over the mountains, as several of them are becoming lazy from inaction. At night these games were concluded by a dance. One of the Indians informed us that we could not pass the mountains before the next full moon, or about the first of July; because, if we attempted it before that time, the horses would be forced to travel without food three days on the top of the mountains. This intelligence was disagreeable, as it excited a doubt as to the most proper time for passing the mountains; but having no time to lose, we are determined to risk the hazards, and start as soon as the Indians generally consider it practicable, which is about the middle of this month.

Monday, 9. Our success yesterday encouraged us to attempt to exchange some more of our horses, whose backs were unsound, but we could dispose of one only. Hohastilpilp, who visited us yesterday, left us with several Indians, for the plains near Lewis's river, where the whole nation are about to assemble. The Brokenarm too, with all his people, stopped on their way to the general rendezvous, at the same place. The Cutnose, or Neeshnepahkecook, borrowed a horse, and rode down a few miles after some young eagles. He soon returned with two of the gray kind, nearly grown, which he meant to raise for the sake of the feathers. The young chief, who some time since made us a present of
two horses, came with a party of his people and passed the night with us. The river, which is about one hundred and fifty yards wide, has been discharging vast bodies of water, but notwithstanding its depth, the water has been nearly transparent, and its temperature quite as cold as our best springs. For several days, however, the river has been falling, and is now six feet lower than it has been, a strong proof that the great body of snow has left the mountains. It is, indeed, nearly at the same height as when we arrived here; a circumstance which the Indians consider as indicating the time when the mountains may be crossed. We shall wait, however, a few days, because the roads must still be wet and slippery, and the grass on the mountains will be improved in a short time. The men are in high spirits at the prospect of setting out, and amused themselves during the afternoon with different games.

Tuesday, 10. After collecting our horses, which took much time, we set out at eleven o'clock for the Quamash flats. Our stock is now very abundant, each man being well mounted, with a small load on a second horse, and several supernumerary ones, in case of accident or want of food. We ascended the river hills, which are very high, and three miles in extent; our course being north 22º east, and then turned to north 15º west, for two miles till we reached Collins's creek. It is deep and difficult to cross, but we passed without any injury, except wetting some of our provisions, and then proceeded due north for five miles to the eastern edge of the Quamash flats near where we first met the Chopunnish in the autumn. We encamped on the bank of a small stream, in a point of woods, bordering the extensive level and beautiful prairie which is intersected by several rivulets, and as the quamash is now in blossom, presents a perfect resemblance of lakes of clear water.

A party of Chopunnih, who had overtaken us a few miles-above, halted for the night with us, and mentioned that they
too had come down to hunt in the flats, though we fear they expect that we will provide for them during their stay.

The country through which we passed is generally free from stone, extremely fertile, and supplied with timber, consisting of several species of fir, long-leafed pine and larch. The undergrowth is chokecherry, near the water courses, and scattered through the country, black alder, a large species of red root now in bloom, a plant resembling the pawpaw in its leaf, and bearing a berry with five valves of a deep purple colour. There were also two species of sumach, the purple haw, seven bark, serviceberry, gooseberry, the honeysuckle, bearing a white berry, and a species of dwarf pine, ten or twelve feet high, which might be confounded with the young pine of the long-leafed species, except that the former bears a cone of a globular form, with small scales, and that its leaves are in fascicles of two resembling in length and appearance the common pitch pine. We also observed two species of wild rose, both quinquepetalous, both of a damask red colour, and similar in the stem; but one of them is as large as the common red rose of our gardens; its leaf too is somewhat larger than that of the other species of wild rose, and the apex, as we saw them last year, were more than three times the size of the common wild rose.

We saw many sandhill cranes, and some ducks in the marshes near our camp, and a greater number of burrowing squirrels, some of which we killed, and found them as tender and well flavoured as our gray squirrels.

Wednesday, 11. All our hunters set out by daylight; but on their return to dinner, had killed nothing except a black bear and two deer. Five of the Indians also began to hunt, but they were quite unsuccessful, and in the afternoon returned to their village. Finding that the game had become shy and scarce, the hunters set out after dinner with orders to stay out during the night, and hunt at a greater distance from the camp, in ground less frequented. But the next
day they returned with nothing except two deer. They were therefore again sent out, and about noon the following day, seven of them came in with eight deer out of a number, as well as a bear, which they had wounded, but could not take. In the meantime we had sent two men forward about eight miles to a prairie on this side of Collins's creek, with orders to hunt till our arrival. Two other hunters returned towards night, but they had killed only one deer, which they had hung up in the morning, and it had been devoured by the buzzards. An Indian who had spent the last evening with us, exchanged a horse for one of ours, which being sick, we gave a small axe and a knife in addition. He seemed very much pleased, and set out immediately to his village, lest we should change our minds and give up the bargain, which is perfectly allowable in Indian traffic. The hunters resumed the chase in the morning, but the game is now so scarce that they killed only one deer. We therefore cut up and dried all the meat we had collected, packed up all our baggage, and hobbled our horses to be in readiness to set out. But in the morning,

Sunday, 15, they had straggled to such a distance, that we could not collect them without great difficulty, and as it rained very hard, we waited till it should abate. It soon, however, showed every appearance of a settled rain, and we therefore set out at ten o'clock. We crossed the prairie at the distance of eight miles, where we had sent our hunters, and found two deer which they had hung up for us. Two and a half miles farther, we overtook the two men at Collins's creek. They had killed a third deer, and had seen one large and another white bear. After dining we proceeded up the creek about half a mile, then crossing through a high broken country for about ten miles, reached an eastern branch of the same creek, near which we encamped in the bottom, after a ride of twenty-two miles. The rains during the day made the roads very slippery, and joined to the quantity of fallen timber, rendered our progress slow and laborious to the
horses, many of which fell through without suffering any injury. The country through which we passed has a thick growth of long-leafed pine, with some pitch-pine, larch, white-pine, white cedar or arbor-vitae of large size, and a variety of firs. The undergrowth consists chiefly of reed root, from six to ten feet in height, with the other species already enumerated. The soil is in general good, and has somewhat of a red cast, like those near the southwest mountain in Virginia. We saw in the course of our ride the speckled woodpecker, the logcock or large woodpecker, the bee-martin, and found the nest of a humming bird, which had just began to lay its eggs.

Monday, 16. We readily collected our horses, and having taken breakfast, proceeded at six o’clock up the creek, through handsome meadows of fine grass, and a great abundance of quamash. At the distance of two miles we crossed the creek, and ascended a ridge in a direction towards the northeast. Fallen timber still obstructed our way so much, that it was eleven o’clock before we had made seven miles, to a small branch of Hungry creek. In the hollows and on the north side of the hills large quantities of snow still remain, in some places to the depth of two or three feet. Vegetation too is proportionally retarded, the dogtooth violet being just in bloom, and the honeysuckle, huckleberry, and a small species of white maple, beginning to put forth their leaves. These appearances in a part of the country comparatively low, are ill omens of the practicability of passing the mountains. But being determined to proceed, we halted merely to take a hasty meal, while the horses were grazing, and then resumed our march. The route was through thick woods and over high hills, intersected by deep ravines and obstructed by fallen timber. We found much difficulty also in following the road, the greater part of it being now covered with snow, which lies in great masses eight or ten feet deep, and would be impassable were it not so firm as to bear our horses. Early in the evening
we reached **Hungry creek**, at the place where captain Clarke had left a horse for us as we passed in September, and finding a small glade with some grass, though not enough for our horses, we thought it better to halt for the night, lest by going further we should find nothing for the horses to eat. Hungry creek is small at this place, but is deep, and discharges a torrent of water, perfectly transparent, and cold as ice. During the fifteen miles of our route to-day, the principal timber was the pitch-pine, white-pine, larch, and fir. The long-leafed pine extends but a small distance on this side of **Collins's creek**, and the white cedar does not reach beyond the branch of Hungry creek on which we dined. In the early part of the day we saw the columbine, the bluebell, and the yellow flowering pea in bloom. There is also in these mountains a great quantity of angelica, stronger to the taste, and more highly scented than that common in the United States. The smell is very pleasant, and the natives, after drying and cutting them into small pieces, wear them in strings around their necks.

Friday 17. We find lately that the air is pleasant in the course of the day, but notwithstanding the shortness of the night, becomes very cold before morning. At an early hour we collected our horses, and proceeded down the creek, which we crossed twice with much difficulty and danger, in consequence of its depth and rapidity. We avoided two other crossings of the same kind, by crossing over a steep and rocky hill. At the distance of seven miles, the road begins the ascent of the main ridges which divide the waters of the Chopunnish and Kooskooskee rivers. We followed it up a mountain for about three miles, when we found ourselves enveloped in snow, from twelve to fifteen feet in depth, even on the south side of the mountain, with the fullest exposure to the sun. The winter now presented itself in all its rigours, the air was keen and cold, no vestige of vegetation was to be seen, and our hands and feet were benumbed. We halted at the sight of this new difficulty. We already knew, that to wait till the snows
of the mountains had dissolved, so as to enable us to distinguish the road, would defeat our design of returning to the United States this season. We now found also that as the snow bore our horses very well, travelling was infinitely easier than it was last fall, when the rocks and fallen timber had so much obstructed our march. But it would require five days to reach the fish-weirs at the mouth of Colt creek, even if we were able to follow the proper ridges of the mountains; and the danger of missing our direction is exceedingly great, while every track is covered with snow. During these five days too we have no chance of finding either grass or underwood for our horses, the snow being so deep. To proceed, therefore, under such circumstances, would be to hazard our being bewildered in the mountains, to insure the loss of our horses, and should we even be so fortunate as to escape with our lives, we might be obliged to abandon all our papers and collections. It was therefore decided not to venture any further; to deposit here all the baggage and provisions, for which we had no immediate use, and reserving only subsistence for a few days, return while our horses were yet strong, to some spot where we might live by hunting, till a guide could be procured to conduct us across the mountains. Our baggage was placed on scaffolds and carefully covered, as were also the instruments and papers, which we thought it safer to leave than to risk them over the roads and creeks by which we came. Having completed this operation, we set out at one o'clock, and treading back our steps, reached Hungry creek, which we ascended for two miles, and finding some scanty grass, we encamped. The rain fell during the greater part of the evening, and as this was the first time that we have ever been compelled to make any retrograde movement, we feared that it might depress the spirits of the men; but though somewhat dejected at the circumstance, the obvious necessity precluded all repining. During the night our horses straggled in search of food to a considerable distance among
the thick timber on the hill sides, nor could we collect them till nine o'clock the next morning.

Wednesday, 18. Two of them were however still missing, and we therefore directed two of the party to remain and hunt for them. At the same time, we despatched Drewyer and Shannon to the Chopunnish, in order to hasten the arrival of the Indians who had promised to accompany us; or at any rate, to procure a guide to conduct us to Traveller's-rest. For this purpose they took a rifle, as a reward to any one who would engage to conduct us, with directions to increase the reward, if necessary, by an offer of two other guns, to be given immediately, and ten horses, at the falls of the Missouri; we then resumed our route. In crossing Hungry creek, one of the horses fell, and rolling over with the rider, was driven for a considerable distance among the rocks; but he fortunately escaped without losing his gun or suffering any injury. Another of the men was cut very badly, in a vein in the inner side of the leg, and we had great difficulty in stopping the blood. About one o'clock we halted for dinner at the glade, on a branch of Hungry creek, where we had dined on the 16th. Observing much track of deer, we left two men at this place to hunt, and then proceeded to Collin's creek, where we encamped in a pleasant situation, at the upper end of the meadows two miles above our encampment of the 15th inst. The hunters were immediately sent out, but they returned without having killed any thing, though they saw some few tracks of deer, very great appearance of bear, and what is of more importance, a number of what they thought were salmon-trout, in the creek. We therefore hope, by means of these fish and other game to subsist at this place without returning to the Quamash flats, which we are unwilling to do, since there are in these meadows great abundance of good food for our horses.

Thursday, 19. The hunters renewed the chase at a very early hour, but they brought only a single fish at noon.
The fishermen were more unsuccessful, for they caught no fish, and broke their two Indian gigs. We, however, mended them with a sharp piece of iron, and towards evening they took a single fish, but instead of finding it the salmon of this spring's arrival, which would of course have been fine, it proved to be a salmon-trout of the red kind, which remain all winter in the upper parts of the rivers and creeks, and are generally poor at this season. In the afternoon, the two men who were left behind, in search of the horses, returned without being able to find them, and the other two hunters arrived from Hungry creek with a couple of deer. Several large morels were brought in to-day, and eaten, as we were now obliged to use them without either salt, pepper or grease, and seemed a very tasteless insipid food. Our stock of salt is now wholly exhausted, except two quarts, which we left on the mountain. The musquitoes have become very troublesome since we arrived here, particularly in the evening.

Friday, 20. The scantiness of our subsistence was now such that we were determined to make one effort to ascertain if it be possible to remain here. The hunters therefore set out very early. On their return in the evening, they brought one deer, and a brown bear of the species called by the Chopunnish yahhar, the talons of which were remarkably short, broad at the base, and sharply pointed. It was in bad order, and the flesh of bear in this situation is much inferior to lean venison or elk. We also caught seven trout. But the hunters now reported that game was so scarce, and so difficult to be approached, in consequence of thick underbrush and fallen timber, that with their utmost exertions, they could not procure us subsistence for more than one or two days longer. We determined, therefore, to set out in the morning for the Quamash flats, where we should hear sooner from the Chopunnish on the subject of our guide, and also renew our stock of food, which is now nearly exhausted. Determined, as we now are, to reach the United States, if
possible, this winter, it would be destructive to wait till the
snows have melted from the road. The snows have formed
a hard coarse bed without crust, on which the horses walk
safely without slipping; the chief difficulty, therefore, is to
find the road. In this we may be assisted by the circum-
stance, that, although, generally ten feet in depth, the snow
has been thrown off by the thick and spreading branches of
the trees, and from round the trunk: the warmth of the
trunk itself, acquired by the reflexion of the sun, or com-
municated by natural heat of the earth, which is never fro-
zen under these masses, has dissolved the snow so much,
that immediately at the roots, its depth is not more than one
or two feet. We therefore hope, that the marks of the bag-
gage rubbing against the trees, may still be perceived, and
we have decided, in case the guide cannot be procured, that
one of us will take three or four of our most expert woods-
men, and with several of our best horses, and an ample sup-
ply of provisions, go on two days' journey in advance, and,
endeavour to trace the route by the marks of the Indian
baggage on the trees, which they would then mark more
distinctly, with a tomahawk. When they should have reach-
ed two days' journey beyond Hungry creek, two of the men
were to be sent back, to apprise the rest of their success, and
if necessary, cause them to delay there, lest, by advan-
cing too soon, they should be forced to halt where no food
could be obtained for the horses. If the trace of the bag-
gage is too indistinct, the whole party is to return to Hun-
gry creek, and we will then attempt the passage by ascend-
ing the main southwest branch of Lewis's river through the
country of the Shoshonees, over to Madison or Gallatin ri-
vers. On that route, the Chopunnish inform us, there is a
passage not obstructed by snow at this period of the year.
That there is such a passage, we learnt from the Shosho-
nees, whom we first met on the east fork of Lewis's river;
but they also represented it as much more difficult than that
by which we came, being obstructed by high steep rugged
mountains, followed by an extensive plain, without either wood or game. We are, indeed, inclined to prefer the account of the Shoshonees, because they would have certainly recommended that route had it been better than the one we have taken; and because there is a war between the Chopunnish and the Shoshones, who live on that route, the former are less able to give accurate information of the state of the country. This route too, is so circuitous, that it would require a month to perform it, and we therefore consider it as the extreme resource. In hopes of soon procuring a guide to lead us over a more practicable route, we collected our horses at an early hour in the morning.

Saturday, 21, and proceeded towards the flats. The mortification of being obliged to tread back our steps, rendered still more tedious a route always so obstructed by brush and fallen timber, that it could not be passed without difficulty and even danger to our horses. One of these poor creatures wounded himself so badly in jumping over fallen logs that he was rendered unfit for use, and sickness has deprived us of the service of a second. At the pass of Collins's creek we met two Indians, who returned with us about half a mile, to the spot where we had formerly slept in September, and where we now halted to dine and let our horses graze. These Indians had four supernumerary horses, and were on their way to cross the mountains. They had seen Drewyer and Shannon, who they said would not return for two days. We pressed them to remain with us till that time, in order to conduct us over the mountains, to which they consented, and deposited their stores of roots and bread in the bushes at a little distance. After dinner we left three men to hunt till our return, and then proceeded; but we had not gone further than two miles when the Indians halted in a small prairie, where they promised to remain at least two nights, if we did not overtake them sooner. We left them, and about seven in the evening found ourselves at the old encampment on the flats; and were glad to find that four
hunters whom we had sent ahead, had killed a deer for supper.

Sunday, 22. At daylight all the hunters set out, and having chased through the whole country, were much more successful than we even hoped, for they brought in eight deer and three bear. Hearing too that the salmon was now abundant in the Kooskooskee, we despatched a man to our old encampment above Collins's creek for the purpose of purchasing some with a few beads, which were found accidentally in one of our waistcoat pockets. He did not return in the evening, nor had we heard from Drewyer and Shannon, who we begin to fear have much difficulty in engaging a guide, and we were equally apprehensive that the two Indians might set out to-morrow for the mountains. Early in the morning,

Monday, 23, therefore, we despatched two hunters to prevail on them, if possible, to remain a day or two longer, and if they persisted in going on, they were to accompany them with the three men at Collins's creek, and mark the route, as far as Traveller's rest, where they were to remain till we joined them by pursuing the same road.

Our fears for the safety of Drewyer, Shannon, and Whitehouse, were fortunately relieved by their return in the afternoon. The former brought three Indians, who promised to go with us to the falls of the Missouri for the compensation of two guns. One of them is the brother of the Cutnose, and the other two had each given us a horse, at the house of the Brokenarm, and as they are men of good character, and respected in the nation, we have the best prospect of being well served. We therefore secured our horses near the camp, and at an early hour next morning,

Tuesday 24, set out on a second attempt to cross the mountains. On reaching Collins's creek, we found only one of our men, who informed us that a short time before he arrived there yesterday, the two Indians, tired of waiting, had set out, and the other four of our men had accompanied them
as they were directed. After halting, we went on to Fish creek, the branch of Hungry creek, where we had slept on the nineteenth instant. Here we overtook two of the party who had gone on with the Indians, and had now been fortunate enough to persuade them to wait for us. During their stay at Collins’s creek, they had killed a single deer only, and of this they had been very liberal to the Indians, whom they were prevailing upon to remain, so that they were without provisions, and two of them had set out for another branch of Hungry creek, where we shall meet them to-morrow.

In the evening the Indians, in order as they said to bring fair weather for our journey, set fire to the woods. As these consist chiefly of tall fir trees, with very numerous dried branches, the blaze was almost instantaneous, and as the flame mounted to the tops of the highest trees, resembled a splendid display of fire-works. In the morning, Wednesday, 25, one of our guides complained of being sick, a symptom by no means pleasant, for sickness is generally with an Indian the pretext for abandoning an enterprise which he dislikes. He promised, however, to overtake us, and we therefore left him with his two companions, and set out at an early hour. At eleven o’clock we halted for dinner at the branch of Hungry creek, where we found our two men, who had killed nothing. Here too we were joined, rather unexpectedly by our guides, who now appeared disposed to be faithful to their engagements. The Indian was indeed really sick, and having no other covering except a pair of moccasins and an elk skin dressed without the hair, we supplied him with a buffaloe robe.

In the evening we arrived at Hungry creek, and halted for the night about a mile and a half below our encampment of the sixteenth.

Thursday, 26. Having collected our horses, and taken breakfast, we set out at six o’clock, and pursuing our former route, at length began to ascend, for the second time,
the ridge of mountains. Near the snowy region we killed two of the small black pheasants, and one of the speckled pheasant. These birds generally inhabit the higher parts of the mountains, where they feed on the leaves of pines and firs; but both of them seem solitary and silent birds, for we have never heard either of them make a noise in any situation, and the Indians inform us that they do not in flying drum or produce a whirring sound with their wings. On reaching the top of the mountain, we found our deposit perfectly untouched. The snow in the neighbourhood has melted nearly four feet since the seventeenth. By measuring it accurately, and comparing it by a mark which we then made, the general depth we discover to have been ten feet ten inches, though in some places still greater; but at this time it is about seven feet. It required two hours to arrange our baggage and to prepare a hasty meal, after which the guides urged us to set off, as we had a long ride to make before reaching a spot where there was grass for our horses. We mounted, and following their steps, sometimes crossed abruptly steep hills, and then wound along their sides, near tremendous precipices, where, had our horses slipped, we should have been lost irrecoverably. Our route lay on the ridgy mountains which separate the waters of the Kooskooskee and Chopunnish, and above the heads of all the streams, so that we met no running water. The whole country was completely covered with snow, except that occasionally we saw a few square feet of earth, at the roots of some trees, round which the snow had dissolved. We passed our camp of September 18, and late in the evening reached the deserted spot, and encamped near a good spring of water. It was on the steep side of a mountain, with no wood and a fair southern aspect, from which the snow seems to have melted for about ten days, and given place to an abundant growth of young grass, resembling the green sward. There is also another species of grass, not unlike a flag, with a broad succulent leaf which is confined to the upper parts of the highest mountains. It
is a favourite food of the horses, but at present is either covered with snow, or just making its appearance. There is a third plant peculiar to the same regions, and is a species of whortleberry. There are also large quantities of a species of bear-grass, which, though it grows luxuriantly over all these mountains, and preserves its verdure during the whole winter, is never eaten by horses.

In the night there came to the camp a Chopunnish, who had pursued us with a view of accompanying us to the falls of the Missouri. We now learnt that the two young Indians whom we had met on the twenty-first, and detained several days, were going merely on a party of pleasure to the Ootlashoots, or as they call them, Shallees, a band of Tushepahs, who live on Clarke's river, near Traveller's-rest. Early the next morning,

Friday, 27, we resumed our route over the heights and steep hills of the same great ridge. At eight miles distance we reached an eminence where the Indians have raised a conic mound of stone, six or eight feet high, on which is fixed a pole made of pine, about fifteen feet. Here we halted and smoked for some time at the request of the Indians, who told us, that in passing the mountains with their families, some men are usually sent on foot from this place to fish at the entrance of Colt creek, whence they rejoin the main party at the Quamash glade on the head of the Kooskooskee. From this elevated spot we have a commanding view of the surrounding mountains, which so completely enclose us, that although we have once passed them, we almost despair of ever escaping from them without the assistance of the Indians. The marks on the trees, which had been our chief dependence, are much fewer and more difficult to be distinguished than we had supposed; but our guides traverse this trackless region with a kind of instinctive sagacity; they never hesitate, they are never embarrassed; yet so undeviating is their step, that wherever the snow has disappeared, for even a hundred paces, we find the summer
road. With their aid the snow is scarcely a disadvantage, for although we are often obliged to slip down, yet the fallen timber and the rocks, which are now covered, were much more troublesome when we passed in the autumn. The travelling road is indeed comparatively pleasant, as well as more rapid, the snow being hard and coarse, without a crust, and perfectly hard enough to prevent the horses sinking more than two or three inches. After the sun has been on it for some hours it becomes softer than early in the morning, yet they are almost always able to get a sure foothold. After some time we resumed our route, and at the distance of three miles descended a steep mountain, then crossing two branches of the Chopunnish river, just above their forks, began to mount a second ridge. Along this we proceeded for some time, and then, at the distance of seven miles, reached our camp of the sixteenth of September. Near this place we crossed three small branches of the Chopunnish, and then ascended a second dividing ridge, along which we continued for nine miles, when the ridge became somewhat lower, and we halted for the night on a position similar to that of our encampment last evening. We had now travelled twenty-eight miles without taking the loads from our horses or giving them any thing to eat, and as the snow where we halted has not much dissolved, there was still but little grass. Among the vegetation we observed great quantities of the white lily, with reflected petals, which are now in bloom, and in the same forwardness as they were in the plains on the tenth of May. As for ourselves, the whole stock of meat being gone, we distributed to each mess a pint of bear’s oil, which, with boiled roots, made an agreeable dish. We saw several black-tailed or mule-deer, but could not get a shot at them, and were informed that there is an abundance of elk in the valley, near the fishery, on the Kooskooskee. The Indians also assert that on the mountains to our right are large numbers of what they call white buffaloe or mountain sheep. Our horses strayed to some distance to look for food, and in the morning,
Saturday, 28, when they were brought up, exhibited rather a gaunt appearance. The Indians, however, promised that we should reach some good grass at noon, and we therefore set out after an early breakfast. Our route lay along the dividing ridge, and across a very deep hollow, till at the distance of six miles we passed our camp of the fifteenth of September. A mile and a half further we passed the road from the right, immediately on the dividing ridge, leading by the fishery. We went on as we had done during the former part of the route over deep snows, when having made thirteen miles we reached the side of a mountain, just above the fishery, which having no timber, and a southern exposure, the snow had disappeared, leaving an abundance of fine grass. Our horses were very hungry as well as fatigued, and as there was no other spot within our reach this evening, where we could find any food for them, we determined to encamp, though it was not yet midday. But as there was no water in the neighbourhood; we melted snow for cooking, and early in the morning,

Sunday, 29, continued along the ridge which we have been following for several days, till at the end of five miles it terminated; and now bidding adieu to the snows in which we have been imprisoned, we descended to the main branch of the Kooskooskee. On reaching the water side, we found a deer which had been left for us by two hunters who had been despatched at an early hour to the warm springs, and which proved a very seasonable addition to our food; for having neither meat nor oil, we were reduced to a diet of roots, without salt or any other addition. At this place, about a mile and a half from the spot where Quamash creek falls in from the northeast, the Kooskooskee is about thirty yards wide, and runs with great velocity over a bed, which, like those of all the mountain streams, is composed of pebbles. We forded the river, and ascended for two miles the steep acclivities of a mountain, and at its summit found coming in from the right the old road which we had passed on our route
last autumn. It was now much plainer and more beaten, which
the Indians told us was owing to the frequent visits of the
Ootlashoots, from the valley of Clarke's river to the fishery;
though there was no appearance of their having been here
this spring. Twelve miles from our camp we halted to
graze our horses on the Quamash flats, on the creek of the
same name. This is a handsome plain of fifty acres in ex-
tent, covered with an abundance of quamash, and seems to
form a principal stage or encampment for the Indians in
passing the mountains. We saw here several young pheas-
ants, and killed one of the small black kind, which is the
first we have observed below the region of snow. In the
neighbourhood were also seen the tracks of two barefoot In-
dians, which our companions supposed to be Ootlashoots,
who had fled in distress from the Pahkees. Here we dis-
covered that two of the horses were missing. We therefore
sent two men in quest of them, and then went on seven
miles further to the warm springs, where we arrived early
in the afternoon. The two hunters who had been sent for-
ward in the morning had collected no game, nor were several
others, who went out after our arrival, more successful.
We therefore had a prospect of continuing our usual diet of
roots, when late in the afternoon the men returned with the
stray horses and a deer for supper.

These warm springs are situated at the foot of a hill, on
the north side of Traveller's-rest creek, which is ten yards
wide at this place. They issue from the bottoms, and through
the interstices of a gray freestone rock, which rises in ir-
regular masses round their lower side. The principal spring,
which the Indians have formed into a bath by stopping the
run with stone and pebbles, is about the same temperature
as the warmest bath used at the hot springs in Virginia. On
trying, captain Lewis could with difficulty remain in it nine-
teen minutes, and then was affected with a profuse perspi-
rations. The two other springs are much hotter, the tempe-
rature being equal to that of the warmest of the hot springs
in Virginia. Our men as well as the Indians amused themselves with going into the bath; the latter, according to their universal custom, going first into the hot bath, where they remain as long as they can bear the heat, then plunging into the creek, which is now of an icy coldness, and repeating this operation several times, but always ending with the warm bath.