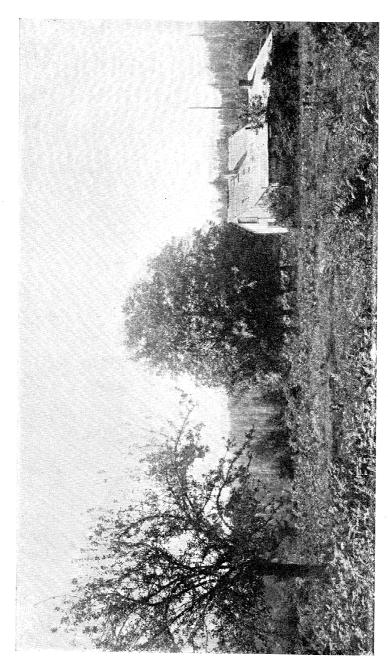
CHAPTER IV

THE WINTER AT FORT CLATSOP, 1805-1806

The contrast between the situation of the explorers at Fort Mandan and the winter quarters for 1805–06 was a wide one. Climate, locality, surroundings, Indian neighbors, food—all were nearly antithetical. Instead of cold there was rain and fog; instead of high, bare hills with a wide prairie stretching in all directions, there were low timbered hills with limited meadows, or valleys and marshy grounds between, and the outlook was circumscribed. At Fort Mandan they were 1800 feet above sea level; now they were at the level of the ocean itself, and the narrow sluggish river in front of their camp was subject to the ebb and flow of the tides. The Indians around them at Clatsop were root and fish eaters and had never seen or tasted buffalo meat. Instead of the juicy ribs and humps of the bison the party now lived on lean elk meat, fish, and wappatoo roots.

The site of their camp was real y a good and pleasant one, but it bears little, if any, resemblance to-day to what it was in 1806.

This spot was named Fort Clatsop, after a tribe of Indians in whose territory it was situated and its identity and history have been satisfactorily preserved. The chief of the Clatsops was called Cómowool by Lewis and Clark, and he was a frequent and welcome visitor at the fort during the winter, and when Fort Clatsop was abandoned in 1806, the Captains presented the fort to Cómowool, who used it as a fall and winter residence for many years.



Site of Fort Clatsop, 1904.

In 1899, I visited the site of old Fort Clatsop. There were with me, among others, Silas B. Smith of Warrenton, George H. Himes, of the Oregon Historical Society, and George M. Weister, a landscape photographer, both of Portland. There is, evidently, no question as to the point we visited being the identical spot where the fort stood, although there is now nothing in particular to indicate it; but the opinion of those among the party who were old residents and familiar with the subject and with the locality, was unanimous upon this point.

Silas B. Smith was a grandson of the old Clatsop chief Cómowool. As a young man he was educated in New Hampshire, and at the time of my visit to the fort he had hardly reached middle age and was a practising attorney at Warrenton, Oregon, but has recently died. I quote here a portion of a memorandum relating to Lewis and Clark. Fort Clatsop, Chief Cómowool, etc., kindly prepared for me by Mr. Smith soon after our trip was made. I regret that I have had to curtail this document, as it is all interesting, and much of it of considerable value.

Concerning the arrival of the Lewis and Clark expedition at the mouth of the Columbia River in November, 1805, and their sojourn at Fort Clatsop the succeeding winter, as usual, more or less tradition was handed down by the Indians to their descendants, of the doings and characteristics of the people who had come among them.

At that time Cóboway—Kób-oh-way—was the principal chief of the Clatsop tribe of Indians, within whose territory Fort Clatsop was established. Lewis and Clark erroneously gave the name of the chief as Cómowool—that arose no doubt from the indistinct manner in which the Indians pronounced the name; according to their pronunciation the "b" in the name is but faintly sounded.

The chief had three daughters that arrived at womanhood, and all married white men for husbands. The eldest, Kilakotah, finally became Mrs. Louis Labontie, and the two were among the first settlers of the Willamette Valley, Labontie crossing the continent in 1811 with Wilson P. Hunt.

The second, Celiast, became Mrs. Solomon H. Smith. Her Christian name was Helen. With her husband they were among the earlier settlers in the Willamette, finally becoming the first agricultural settlers west of the Coast range of mountains, settling and opening up a farm on Clatsop Plains, Clatsop County, Ore., in August, 1840. Her husband crossed the continent in 1832 with Captain Nathaniel Wyeth, and taught the first schools on the northwest coast, teaching at Fort Vancouver and in the Willamette country in 1833 and 1834.

The third daughter, Yaimast, became Mrs. Joseph Gervais. Gervais also came with Hunt in 1811, and was, I think, the

first settler on the French prairie in the Willamette.

Cóboway's descendants now live in four States—California, Oregon, Montana, and Canada—are too numerous to mention,

and all are drifting away from his race.

My mother, Celiast Cóboway, the chief's second daughter, lived until June, 1891, and always maintained that she remembered the time of Lewis and Clark's arrival, and also seeing the men. Mother said that in one of the houses they used was the large stump of a tree, which had been cut smooth, and which was used as a table. The tree had been cut down and then the house built, enclosing the stump.

The Indians here used to tell of the remarkable marksmanship of Captains Lewis and Clark with firearms, and of the surprises they used to give the savages by the wonderful accuracy

of their shots.

An Indian youth, Twiltch by name, used to assist at Fort Clatsop in the hunting of elk and other game, and was there taught the use of firearms, in the handling of which he became proficient. I knew him in his later years, and in my earlier acquaintance with him he stood at the head of the hunters of his tribe, and more particularly in the art of elk hunting. It was always his boast that he was taught the art by Lewis and Clark.

The Indians inhabiting the upper part of Young's River Valley and the upper Nehalem Valley were known as the Klatskanin people. It was claimed by Chief Cóboway that these people were disposed to attack the encampment at Fort Clatsop, and it was only through his influence and constant dissuasion that they were restrained, and no violence committed.

On December 14, 1813, Alexander Henry visited Fort Clatsop from Fort George (Astoria), and says:

We walked up [from some Clatsop Indian houses] to see the old American winter quarters of Captains Lewis and Clark in 1805–06, which are in total ruins, the wood having been cut down and destroyed by the Indians; but the remains are still visible. In the fort are already grown up shoots of willows 25 feet high. The situation is the most pleasant I have seen hereabouts, and by far the most eligible, both as to security from the natives, and for hunting.

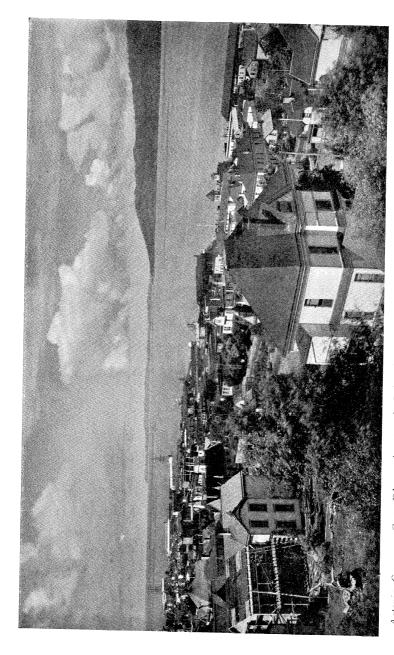
From my knowledge of Silas B. Smith I am confident that his statements are entirely reliable. But to settle the question of identity of Fort Clatsop, the Oregon Historical Society, subsequent to our visit, carried the investigation further, and of several certifications I give a part of one, by Carlos W. Shane, dated June 15, 1900.

I came to Oregon in 1846, and in 1850 I located a donation land claim on a tract of land which included the site of Fort Clatsop; I built a house on the land in 1851 and occupied it until 1853. A few feet from where I built my house there were at that time the remains of two of the Lewis and Clark cabins. They lay east and west, parallel with each other, and ten or fifteen feet apart. Each cabin was sixteen by thirty feet; three rounds of the south cabin and two rounds of the north cabin were then standing. In the south cabin stood the remains of a large stump. The location of the old stockade was indicated by second growth timber, while all around it was the original growth, or the stumps of trees which had been cut. In clearing away for my house I set fire to the remains of the old cabins and endeavored to burn them.

Two things demanded instant attention upon the arrival of the expedition at Fort Clatsop; first, the construction of their huts; second, an exploration to the seacoast to select a place where they could make salt.

The want of the latter was now seriously felt. On the very next day therefore after arriving at Fort Clatsop, "Captain Clark set out with five men" for the seacoast. The plan was to erect a furnace at the seashore, boil the sea water, and obtain by evaporation the needed amount of salt.

¹ In Proceedings, Oregon Historical Society for 1900.



Astoria, Oregon. Cape Disappointment in Lejt Distance; Chinook Point—Point Open-slope of Sergeant Gass—11

Clark had a hard time in getting to the coast. Deep creeks, marshes, bogs into which the men sank hip deep, were athwart his trail, but happily they met three Clatsop Indians, who provided a canoe for them to cross the creeks and escorted the party to their village, where the explorers were received and made welcome.

After he [Clark] had eaten, the men of the other houses came and smoked with him. They all appeared much neater in their persons and diet than Indians generally are, and frequently wash their hands and faces, a ceremony by no means frequent elsewhere. While he was conversing with them a flock of brant alighted on the water, and with a small rifle he shot one of them at a great distance. They immediately jumped in and brought it on shore, very much astonished at the shot, which contributed to make them increase their attention. . . . When they thought his appetite had returned, an old woman presented him, in a bowl made of light-coloured horn, a kind of syrup, pleasant to the taste, made from a species of berry common in this country about the size of a cherry, called by the Indians shelwel; of these berries a bread is also prepared, which, being boiled with roots forms a soup, which was served in neat wooden trenchers; this, with some cockles, was his repast.

These berries were the salal berry, common to the coast. When the Captain was ready to retire, Cuskalah, his host, "spread two new mats near the fire, ordered his wife to retire to her own bed," and dispersed the remainder of the company, and the Captain endeavored to sleep, but "was attacked most violently by the flees," and they kept up the attack "dureing the night" so that his sleep was not a very restful one.

Clark's ability as a shot, clipping off the heads of ducks and brant, was naturally a matter of great astonishment to the Clatsops, and while they then treated him with marked consideration because of it, it undoubtedly inclined them, also, to the friendly treatment subsequently and always accorded to the party.

Christmas Wednesday 25th Secember 1805 76 at day light this morning we we anothe by the discharge of the fire arm of all our party a a beliete, Shout and a long which the whole party Joined in under our windows, after which They returned to their worms were Charfule all the morning - after brackfast we devil : ed our Tobacco which amounted to 12 canots one half of which we gave to the men of the party) who used tobacco, and to those who doe not use it ear make a present of a hand. · Kerchief, The Indians leave us in the evening all the party boughy feares in their hills. I Read a frunt of latt Lof a flew horse think Draws and looks, a for mockersons of Whilehour. a Small Indeas backet of Gutherut two Doger White weagies talls of the Indean looman, a. Some black root of the Indians before their Departure - Drew yer informs me that he Saw a Snake pass across the fourth to day. The day proved Thowevery wet and disagreeable we would have spent this day the nation. ity of Christ in fearling, had we any they When to raise our Sperits on even gentify our appetition, our Dener Concerted of Bones Olh, to much sporter that we cated it the miser mentaty, Some sportes pounded fish and a frew roots

Codex "I," Clark, p. 76, Christmas, 1805. Fort Clatsop.

On the 10th of December Clark returned to Fort Clatsop to find that good progress had been made in the construction of the huts, but many of the men were sick. Pryor had a "dislocation of his sholder," a common occurrence with him; Gibson had the "disintary"; Jos. Fields had "biles on his legs," and four of them had "very violent colds."

Gass kept quite a full record of the building of the huts. On Monday, December oth, some of the men were engaged "in clearing a place for huts and a small fort"; on the 10th, "we laid the foundation of our huts"; on the 12th, "we finished three rooms of our cabins, all but the covering, which we expected would cause trouble because of the lack of good splitting timber for roof boards"; on the 14th, "we completed the building of our huts, 7 in number, all but the covering," which was now not going to be difficult to accomplish, for they had found a kind of timber—a species of fir —that "splits freely and makes the finest puncheons I have ever seen. They can be split 10 feet long and 2 broad, not more than an inch and a half thick." On the 15th they were "finishing the quarters of the Commanding Officers," and "on the evening of the 24th we got all our huts covered and daubed." On the 25th—Christmas—

we left our camp and moved into our huts. At daybreak all the men paraded and fired a round of small arms, wishing the Commanding Officers a merry Christmas. In the course of the day Capt. Lewis and Capt. Clarke collected what tobacco remained and divided it among those who used tobacco as a Christmas-gift; to the others they gave handkerchiefs in lieu of it. We had no spirituous liquors to elevate our spirits this Christmas; but of this we had but little need, as we were all in very good health. . . . We have no kind of provisions but meat, and we are without salt to season that.

They were able, therefore, to spend Christmas in the fort, as they had done at Fort Mandan a year before. That the construction of Fort Clatsop was easier than that of Fort Mandan is shown by the time occupied in the work. They laid the foundations of Fort Mandan on November 2, 1804, and finished the fortification on the evening of December 24th. The foundation of Fort Clatsop was laid on December 10, 1805, and "we completely finished our fortification" on the evening of December 30th, and on January 1, 1806, he completes the record with, "we gave our Fortification the name of Fort Clatsop." There appears, however, to be no description of the fort, but it was, presumably, fashioned more or less after Fort Mandan.

The party kept Christmas, after a fashion. Besides rehearsing the events of the day as already noted by Gass, the regular narrative continues:

The remainder of the day was passed in good spirits, though there was nothing in our situation to excite much gayety. The rain confined us to the house, and our only luxuries in honour of the season were some poor elk, so much spoiled that we eat it through mere necessity, a few roots, and some spoiled pounded fish.

On December 28th, five men, Drewyer, Shannon, Collins, Labiche, and R. Fields, were sent out to hunt, and five more, J. Fields, Bratton, Willard, Gibson, and Wiser, departed "each with a large kettle," for the seaside "to begin the manufacture of salt."

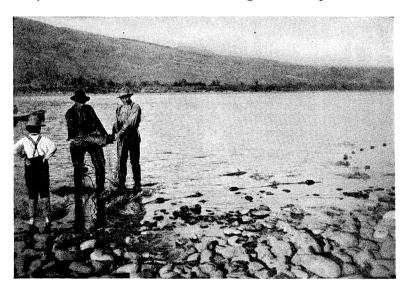
The salt-makers, upon their arrival at the seaside, did not find a suitable spot for carrying on this work until five days had elapsed, so that they were delayed in their operations, but on the 5th of January, 1806, Willard and Wiser returned to the fort with a gallon of home-made salt, evaporated from the water of the ocean.

The salt was pronounced a success. The narrative says that it was

white, fine, and very good, but not so strong as the rock salt common to the western parts of the United States. It proves

to be a most agreeable addition to our food, and as the salt-makers can manufacture three or four quarts a day, we have a prospect of a very plentiful supply.

It is a gratifying fact that the site of the salt works used by Lewis and Clark, as well as of Fort Clatsop, is known and protected at the present day. Through the Indians and early settlers, the tradition relating to this spot and its



Salmon Fishing on the Lower Columbia River.

identity has fortunately been preserved. In 1899, with several of the party heretofore mentioned, I visited the old rock cairn where this process was carried on. I quote Smith anent this also:

Mother often told of Lewis and Clark making salt near Tillamook Head, at the place now known as Seaside [a pleasant summer resort]; but she used to tell this long before the place was called Seaside. The name Seaside was given by Ben Holladay in 1872, when he built his hotel there and called it the

"Seaside House"; then the name Seaside was given to that section. Previous to that the Indian name of the place was Necotaht.

I remember also hearing some white men and Indians, in the fall of 1849, who went to Necotáht, say on their return that they saw the place where Lewis and Clark made salt near Tillamook Head. My mother used to tell of their salt-making when we did n't have any of the works of Lewis and Clark to consult, but simply tradition. It was generally understood among whites and Indians here as long ago as I can well remember that the place of salt-making by Lewis and Clark was near Tillamook Head.

Mr. A. J. Cloutrie, a resident at the Seaside since 1856, stated to me more than thirty years ago, that the stone arch where Lewis and Clark made salt was not far from his residence, and proposed to show it to me if I wished to see it; that was in my younger days, and I did not care much about seeing it, so we did n't go. From all these traditions and circumstances, I am well satisfied that the cairn which I visited near Tillamook Head, in company with Mr. O. D. Wheeler, of the Northern Pacific railway; George H. Himes, [Assistant] Secretary of the Oregon Historical Society, and others, on the 28th of August, 1899, was the identical structure where Lewis and Clark's men manufactured salt from sea water in the winter of 1805–06.

On this visit we had for guide one Mr. John Hall, a son-inlaw of the above-mentioned Mr. Cloutrie, and to whom Mr. Cloutrie, before his death, had pointed out the stone structure as the salt-making pit of Lewis and Clark.

From the *Proceedings of the Oregon Historical Society*, I extract the following interesting paper bearing upon this matter:

I, Tsin-is-tum, otherwise known as Jennie Michel, say: I am a Clatsop Indian. My mother was named Wah-ne-ask. My father was killed in the bombardment of the Clatsop village by the ship sent by Dr. McLoughlin; I do not remember his name.

I knew Chief Cóboway, also my uncle Ka-ta-ta, my relative Nah-satch-ka, and his brother Twa-le-up and Twilch. They all knew Lewis and Clark and their men, and Ka-ta-ta hunted elk with them. When Lewis and Clark first came and camped on Tongue Point, the Indians believed they came to make war on

them and they cut trees across the rivers near their town so the women and children could run to the woods and hide, and came down the Neahcoxie to the Necanicum and hid their canoes. . . .

A few days ago I went to the place where Lewis and Clark's men made salt with Silas B. Smith, George Noland, L. B. Cox, William Galloway and others. I had often been to this place with my mother when I was a girl and young woman picking esulth (kinnikinnick) and quin-quin (salal) berries. . . . My mother told me she had often seen Lewis and Clark's men making salt at this place. . . All the Indians who had known Lewis and Clark and their men used to say they made salt at this place. They always called it Lewis and Clark's place. The Indians said the men who made salt lived in a big tent a little way towards the mouth of the Necanicum from this place. When I saw this place with my mother the rocks in the large pile were built up all around as high as the head of a small child. The end towards the ocean was open.

Dated June . . , 1900.

Tsin-is-Tum her x mark

Witness signature of Tsin-is-tum.

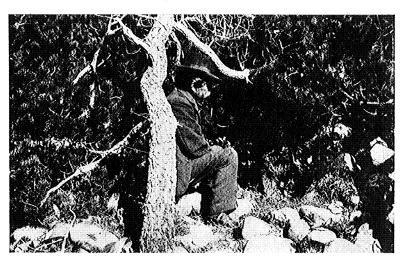
GEORGE NOLAND.

I see no reason to doubt that this cairn, visited by our party, was what it is claimed to be. It is certainly an ancient structure, now much overgrown by dwarf pines or similar trees, so that it was difficult for Weister to photograph it. Its size is commensurate with the five kettles that were used in the salt-making. It measured 33 feet in circumference; 2 feet 3 inches in height; was 6 feet long and 9 feet 4 inches across, and the interior measured 2 feet 6 inches.

The structure is placed on a widely extended bed of boulders bearing the appearance of having been the work of a glacier and its resultant stream. It was built from the round clean stones, and they seem to have been cemented together with a native clay near at hand. The cairm is oubtless greatly changed in appearance from what

it was when in use, and the fireplace or furnace was evidently long and narrow. On carefully making some excavations we found pieces of burned and flaked stone, ashes, and the rocks were burned and discolored by fire.

The spot is a protected one; it is but a few rods from the ocean, and is now under the care and protection of the Oregon Historical Society.



Remains of the Old Lewis and Clark Salt Cairn, or Furnace, near Seaside, Oregon, in 1899. The Late Silas B. Smith, a Descendant of the Chief Cómowool of Lewis and Clark, Seated thereon.

The winter at Clatsop was a wet one—a *very* wet one. Gass, under date of April 8, 1806, when on their return journey, epitomizes the situation exactly:

Some of the men are complaining of rheumatick pains, which are to be expected from the wet and cold we suffered last winter, during which from the 4th of November 1805 to the 25th of March 1806, there were not more than twelve days in with it did not rain, and of these but six were clear.

No wonder they had "rheumatick pains"! It is surpris-

ing that Bratton was the only man who was used up by the hardships, and, perhaps, dissipations should be added, of that winter. I think the season may have been one of excessive rainfall, and yet, their location was one where rain and fog are prevalent.

The journal for Thursday, December 26th, is devoted to rain and *fleas* and is worth reprinting.

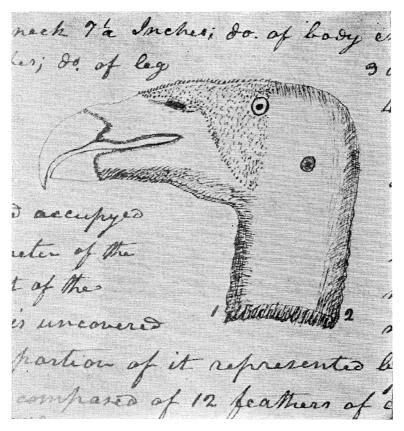
December 26th, brought a continuation of rain, accompanied with thunder, and a high wind from the southeast. . . . The fleas which annoyed us near the portage of the Great Falls have taken such possession of our clothes that we are obliged to have a regular search every day through our blankets as a necessary preliminary to sleeping at night. These animals indeed are so numerous that they are almost a calamity to the Indians of this country. When they have once obtained the mastery of any house it is impossible to expel them, and the Indians have frequently different houses, to which they resort occasionally when the fleas have rendered their permanent residence intolerable; yet in spite of these precautions every Indian is constantly attended by numbers of them, and no one comes into our houses without leaving behind him swarms of these tormenting insects.

It was as wet at Clatsop in the winter of 1805–06 as it had been cold at Mandan in 1804–05. The time was passed in various useful diversions; stockading their fort, bartering with the Indians, studying natural history, ethnology, etc., and naturally there was much hunting, of elk principally, for food and skins. Toward spring the elk became shy and left the region, thus hastening the party's departure.

Gass kept an inventory which shows that between December 1, 1805, and March 20, 1806, they killed 131 elk and twenty deer, and that there were on hand at the latter date 338 pairs of "mockasons."

An episode of the winter was a visit of Captain Clark and a large party to the seacoast to see a stranded whale, and if possible, to procure some of the blubber to add to the variety of their table.

As soon as this expedition was decided upon, Sacágawea made a strong plea to be allowed to go.



Facsimile of Pen-and-Ink Drawing by Captain Lewis of the California Condor, "Pseudogryphus californianus." From Codex "J," Lewis.
p. 80, Fort Clatsop.

The poor woman stated very earnestly that she had travelled a great way with us to see the great water, yet she had never been down to the coast, and now that this monstrous fish was vol. 11. -14.

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

The party first visited the salt-makers, and then, under guidance of an Indian climbed up and over Tillamook Head, a black, high, rounded, forest-covered point near-by, and finally reached the whale on the beach near Nehalem Bay. Between Tillamook Head and the bay they reached the high point seen from Cape Disappointment and called by Lewis, Clark's Point of View, from which they enjoyed a "romantic view."

The Indians had disposed of the whale, however, and all that Clark, Sacágawea, and the others saw was the skeleton. They were able to purchase some three hundred pounds of blubber and a little oil, but as the natives had a "corner" on the market, the Captain had to pay dear for his blubber. However, he felt repaid for the trip and was satisfied with the exchange of commodities, and thankful to "providence for directing the whale to us; and think him much more kind to us than he was to jonah having sent this monster to be swallowed by us, insted of swallowing of us as jonah's did."

On this trip M'Neal was saved from being murdered by the friendliness of a Chinook squaw.

On the return to Fort Clatsop they saw an instance of what great burdens Indian women bear. They were crossing the mountain and

as one of the women was descending a steep part of the mountain her load slipped from her back, and she stood holding it by a strap with one hand, and with the other supporting herself by a bush. Captain Clark, being near her, undertook to replace the load, and found it almost as much as he could lift, and above one hundred pounds in weight. Loaded as they were they kept pace with us till we reached the salt-makers' tents, where we passed the night, while they continued their route.

Hunting naturally occupied a great deal of the time of the hunters during the winter, and it was hard work. elk were plentiful at first, but the country was so swampy that with the deep streams and heavy timber encountered, it proved an arduous task to supply the hungry horde with fresh meat. Had it not been for the fish and roots that the party were able to obtain from the Indians they would have gone hungry more than once While, at first, the hunters kept the larder fairly well supplied, yet much of the game killed was at such distances from camp that more or less of it spoiled before it could be transported and, besides, the weather was not calculated to preserve it when it did reach there. The meat was most of it jerked or smoked as soon as possible, in order to preserve it, but even then the damp, soft weather caused much of it to become tainted and unfit for use. It was not an infrequent condition that their supply of food would be insufficient for more than two or three days. On February 26th, the journal says: "We have only sufficient for three days in store, and that consists only of inferior dried elk, somewhat tainted." Just before the start for home and after the elk had retreated to their summer range in the mountains, there occurs this passage:

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.

After a period of semi-fasting it is interesting to see with what pleasure they welcome a fresh supply of food. One entry runs:

Drewyer arrived [from up the Columbia] with a most acceptable supply of fat sturgeon, fresh anchovies, and a bag of wappatoo holding about a bushel. We feasted on these fish and roots.

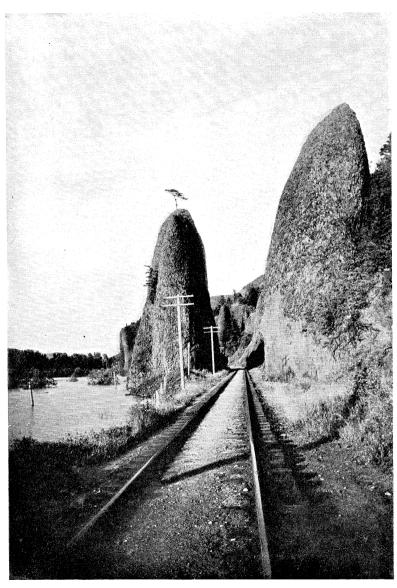
Their appetites were keen at all times even though the food was the same from day to day.

Our fare is lean elk boïled, with very little salt. The whale-blubber we have used sparingly, but that is now exhausted. On such food we do not feel strong, but enjoy fair health,—a keen appetite answers well instead of sauces and other luxuries, and meal-time is always interesting. Sometimes we find ourselves asking the cook when breakfast or dinner will be ready.

As has been suggested, the party were able to procure vegetables, edible roots, from the tribes about them, As we have our potato, turnip, radish, parsnip, onion, etc., so the Indians had their kamas, kowse, wild onion, shanatawhee, wappatoo, and other food roots, many of them as nutritious as our own. The most valuable of these plants found near Clatsop was the wappatoo, and it was an important article of barter among the tribes. It did not grow in the immediate neighborhood of Clatsop, and the Clatsops, Chinooks, and coast tribes traded for the wappatoo with the tribes farther up the river. Lewis and Clark obtained their supply from both the coast and river tribes, sending several expeditions up the river during the winter for that purpose.

The wappatoo was found in great quantity on a large island at the junction of the Willamette and Columbia rivers, named "Wappatoo" Island by Captain Clark, on the homeward journey, and now known as Sauvie's Island. Referring to the island and the plant, the journal records that

the chief wealth of this island consists of the numerous ponds in the interior, abounding with the common arrowhead (sagittaria sagittifolia) [Sagittaria variabilis—Coues], 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.



Pillars of Hercules, along the Columbia River, near Vancouver, but on the Oregon Shore. O. R. R. & N. Co. Railway in Foreground.

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.

Among the berries to be found on the coast were the wild cranberry (solme), salal (shallun) berry, wild crab-apple, wild huckleberry, blackberry, etc.

While at Fort Clatsop the Captains paid particular attention to, and prepared elaborate memoranda of, the resources of the country, botanically and zoölogically, west of the Rockies, both as they observed them themselves and as they ascertained the facts from the Indians, and their statements relative thereto are not the least valuable of the voluminous records of the exploration.

The great and magnificent trees of the coast, the firs, pines, and spruces, were described as well as they could then scientifically describe them.

Silas Smith, in his letter already referred to, regarding the explorers' comments on the botany of the region wrote as follows:

Lewis and Clark speak of the Indians bringing "shanataque" and "culhoma." The first should be shanatawhee. It is the root of the edible thistle; the first year's growth of the thistle, that has one straight root something like a parsnip. They gather and cook them in a pit with hot rocks and grass, the whole being covered with dirt and left in that manner over night; when taken out the roots are of a dark purple color, the starch in the root has been converted into glucose, and it is tender, sweet, and palatable. "Culhoma" should be culwhayma. It is the root of what is popularly known as the wild blue *lupine*. The root grows two or three feet long and about one inch to an inch and a half in diameter. This is cooked generally in hot ashes, as we would roast a potato in ashes, and it tastes some-

thing like a sweet potato. They also speak of a berry something like the "Solomon's Seal," which the Indians call "Solme." In this they made a mistake, and made a wrong application of the name Solme. Solme is the wild cranberry and nothing else. It is not the "Solomon's Seal," nor any variety of it.

The remarks of the Captains regarding the horse and dog found among the natives, and those descriptive of the wild animals, appear to be sensible and to have been received in a creditable manner by the scientific world.

Dr. Coues said that the "most notable discovery made in zoology by Lewis and Clark" was that of the grizzly, or grisly, bear, both terms fitting the animal. Other notable discoveries were those of the true black-tailed deer (Cariacus columbianus) found west of the Rockies only, and the well-known mule-deer (Cariacus macrotis) found both east and west of the Rocky Mountains.

The chapter on this subject is quite an elaborate one and can hardly be epitomized here to advantage. Beasts, birds, fishes, and reptiles were all embraced within its zoological and botanical category.

The ethnological studies and records of the Captains made at Fort Clatsop were very complete. The only knowledge that history records of some of these native people of the coast is that contained in the report of Lewis and Clark. Besides the running commentary in the narrative proper, they prepared an *Estimate of the Western Indians*, which was supplementary to the *Statistical View* prepared at Fort Mandan.

The Captains were industrious that winter, and evidently laid under contribution every Indian, of whatever nation, who appeared at the fort, in an endeavor to procure information regarding the various tribes that peopled the coast.

The Chinook tribe, with the one-eyed Comcomly at their head, impressed the leaders very unfavorably. On account of their pilfering propensities there was "a general order excluding them from our encampment; so that whenever an Indian wished to visit us, he began by calling out 'No Chinook.'"

These people never resented an indignity, and while, in some respects, much like their neighbors the Clatsops, Wahkiacums, and Cathlamets, yet they seemed to be "inferior to their neighbors in honesty as well as spirit." There seemed to be a permanent peace among the tribes about the mouth of the Columbia, and no forays from extraneous tribes are reported, nor were constant fears of them indicated, as was the case the previous winter at Fort Mandan.

The Chinooks were, numerically, greater than their neighbors, "who owe their safety more to the timidity than the forbearance of the Chinooks."

The Clatsops, in whose territory the party were wintering appear to have ingratiated themselves into the favor of the explorers from the beginning. Of Cómowool, or Cóboway, the Clatsop Chief, the journal says that he is by "far the most friendly and decent savage we have seen in this neighborhood."

These people dressed in skins, and also used garments made from native grasses, rushes, and from cedar bark. They obtained, besides, from the sea traders, articles for dress and for domestic uses. They were somewhat given to tattooing and, like most savages and rude and uncultivated races, decorated themselves with beads, ear and nose rings of wampum, or a species of tooth-shell, elks' tusks, bears' claws, and brass, copper, and iron ornaments.

The personal appearance of these people was not prepossessing, and the "four neighboring nations" hereabout were much alike in most respects. In build, they were squatty and ill-proportioned, and the universal practice of head-flattening which prevailed on the lower Columbia was

Jour Classop. 1806. iary of the weather for the month of January Remarks. 1" (a. x S. W. rac S. W. sun visible for affer minutes about 11. de car SW. 4 5.00. cars 34.5 to carry 5. w. the sun visible for a few onimites only. careh 5 pv rager 5. & the sun visible about 2 hours 12. 56 5.2 Æ car SE f & the shown about 5 hours this evening but E fet cloud S.E. Post my N.E cant S. W began to rain at 10 Pelo and continues all night Lar S.M. caf 3 Av C Say S.M. car N.M cool this marging & N.M. C S.M. A Sov 14. far N. 6 caf S. 15th races 56 race 5. John several inscots meater no ran Swaar Sw SM raines inespectly all night, inant can S.W C rar Sow can Sow named very hard last night 19 car S. car & M rained the greater front of last night. 20 ran S. M ran Sign rains greater part of the night 2/2 car S. W can Sov with how this morning contine all says rear S M car S W wind violent last night & This orinning 23. car Tes 5 NV caf S. W. the sun shown abut 2 h in the fore moon 24" cares S & carnes & 25 harris NE carps NE 16 26" cales NE cas NE NE lengt hanging to the ever of the hours to could the fas NE times a reference passed to the presing t " He the of and in the anex

Page 152 from Codex "J," Lewis. Meteorological Record, January, 1806, Fort Clatsop.

of course utterly repugnant to our ideas of comeliness and beauty.

Swan has described this process of flattening the head very fully, and I give his account of it:

A cradle like a bread trough, is hollowed out from a piece of cedar, and, according to the taste of the parent, is either fancifully carved, or is as simple in its artistic appearance as a pig's trough. This cradle, or canim, or canoe, as they term it. is lined inside with the softest of cedar bark, well pounded and cleaned so as to be as soft as wool. On this the infant is placed as soon as it is born, and covered with the softest cloth or skins they can find. A little pillow at one end slightly elevates the head. The child is placed flat on its back, and a cushion of wool or feathers laid on its forehead. An oblong square piece of wood or bark, having one end fastened by strings to the head of the canoe, is now brought down on the cushion, and firmly secured by strings tied to the sides of the cradle, and causing the cushion to press upon the child's forehead. The infant is then so bound into the cradle that it cannot stir hand or foot, and in this position it remains a year or more, only being taken out to be washed and for exercise.

This pressure on the forehead causes the head to expand laterally, giving an expression of great broadness to the face; but I never perceived that it affected the mind at all, although it disfigures them very much in appearance. I have seen several whose heads had not been thus pressed, and they were smart, intelligent, and quite good-looking; but they were laughed at by the others, who asserted that their mothers were too lazy to shape their heads properly. This flattening of the head appears to be a sort of mark of royalty or badge of aristocracy, for their slaves are not permitted to treat their children thus; but, although I have seen persons with and others without this deformity, I never could discover any superiority of intellect of one over the other.

At Fort Clatsop on January 1st, the narrative refers to a man twenty-five years old, of light complexion, "his face was even freckled, and his hair was long and of a color inclining to red." Gass had seen him on the opposite side of the river, and Cox and Henry both mention him. Cox says

he was the son of an English sailor, a deserter from a trading vessel, his name, Jack Ramsey, and in the time of the Astorians he was a Columbia River pilot.

These Indians—not alone the Clatsops, but the "other nations at the mouth of the Columbia" as well—were loquacious and inquisitive, intelligent, cheerful without being gay, very keen in bargaining, more or less given to pilfering "when it can be done without danger of detection, but do not rob wantonly nor to any large amount." They were entirely ignorant of the use of spirituous liquors, but were great smokers and had "a natural vice for games of hazard." Polygamy was allowed among them, but was not much in vogue.

Regarding the position of women among these people, the narrative presents them as occupying a quite different position from that usually accorded them among the aborigines, owing to their equal ability with the men as breadwinners

. . . Thus, among the Clatsops and Chinooks, who live upon fish and roots, which the women are equally expert with the men in procuring, the former have a rank and influence very rarely found among Indians. The females are permitted to speak freely before the men, to whom indeed they sometimes address themselves in a tone of authority.

As to the standard of morality among these tribes the narrative speaks plainly. "Among these people, as indeed among all Indians," referring to the solicitation of favors by the females, they say that it

is so far from being considered criminal or improper that the females themselves solicit the favours of the other sex with the entire approbation of their friends and connexions. The person is in fact often the only property of a young female, and is therefore the medium of trade, the return for presents, and the reward for services.

As an illustration of the ideas of gratitude and obligation prevailing among these people the Captains recount that, after having rendered some medical service to a Clatsop Indian the latter, as a reward therefor, brought his sister to them.

The young lady was quite anxious to join in this expression of her brother's gratitude, and mortified that we did not avail ourselves of it; she could not be prevailed on to leave the fort, but remained with Chaboneau's wife, in the next room to ours, for two or three days, declining all the solicitations of the men, till, finding at last that we did not relent, she went away, regretting that her brother's obligations were unpaid.

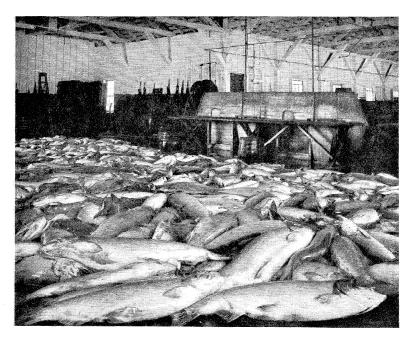
The Columbian tribes do not seem to have been particularly given over to diseases of any sort, and their immoralities, except among the Chinooks, left but slight traces among them

Evidences of the ravages of the smallpox were observable, and this appears to have been the disease which, eventually, largely depopulated the valley of the Columbia of its native races.

The houses of the natives were constructed of wood, and were from twenty to sixty feet long and from fourteen to twenty feet in width. They were built partly above and partly below ground. The ridge-pole was from fourteen to eighteen feet above the surface of the earth, but the eaves were usually close to the ground. Instead of nails or dowels these Indians used "cords [made] of cedar bark." In the roof a hole two or three feet large was left for the smoke to escape, à la tepee. The door was usually just large enough to admit the body.

These people were great fishermen and also expert canoeists. They wrought many useful utensils, mats, baskets, etc., from rushes, grass, wood, and bark, and of these the basket, made from cedar bark and bear grass, was a water-proof vessel and so made, entirely, by close weaving.

But it was in the fabrication of their canoes and in their navigation that the Columbian Indians excelled, and the narrative pays a high tribute to them in this respect. The canoes found below the Great Falls were of "four forms"; The first was about fifteen feet long, for the use of but one or two persons; the second was from twenty to thirty-five feet



Columbia River Salmon.

in length, two and a half feet wide, with two feet depth of hold, and distinguished by a high bowsprit; the third, the canoe in most common use, was from thirty to thirty-five feet long, the bow high and "ornamented with a sort of comb an inch in thickness, cut out of the same log" from which the canoe was made. This canoe, while carrying from ten to twelve persons, was easily transported across portages.

The fourth and largest canoe was a tide-water bark, fifty feet in length and capable of carrying from twenty to thirty persons, or from eight thousand to ten thousand pounds weight. This boat was an elaborate affair, and the remarks of the Captains concerning it and the ease with which the natives managed it deserve to be partially reproduced here:

Like all the canoes we have mentioned, they are cut out of a single trunk of a tree, which is generally white cedar, though the fir is sometimes used. . . . The bow and stern are about the same height, and each [is] provided with a comb reaching to the bottom of the boat. At each end, also, are pedestals formed of the same solid piece, on which are placed strange grotesque figures of men or animals, rising sometimes to the height of five feet, and composed of small pieces of wood, firmly united with great ingenuity by inlaying and mortising, without a spike of any kind. . . . When they embark, one Indian sits in the stern and steers with a paddle, the others kneel in pairs in the bottom of the canoe, and sitting on their heels paddle over the gunwale next to them. In this way they ride with perfect safety the highest waves, and venture without the least concern in seas where other boats or seamen could not live an instant. . . . In the management of these canoes the women are equally expert with the men, for in the smaller boats, which contain four oarsmen, the helm is generally given to the female. . . . These Indians possess very few axes, and the only tool employed in their building, from felling of the tree to the delicate workmanship of the images, is a chisel made of an old file, about an inch or an inch and a half in width. But under all these disadvantages, these canoes, which one would suppose to be the work of years, are made in a few weeks. A canoe, however, is very highly prized; in traffic it is an article of the greatest value, except a wife, which is of equal consideration, so that a lover generally gives a canoe to the father in exchange for his daughter.

The canoe, with these tribes, was a substitute for the horse among other tribes and was an important affair at the death of an individual, as "the Chinooks, Clatsops, and most of the adjoining nations disposed of the dead in canoes."

Swan describes the burial of an old squaw which he witnessed in the fifties, and gives an interesting account of it.

When the canoe was ready, the corpse, wrapped in blankets was brought out and laid in it on mats previously spread. All the wearing apparel was next put in beside the body, together with her trinkets, beads, little baskets, and various trifles she had prized. More blankets were then covered over the body, and mats smoothed over all. Next, a small canoe which fitted into the large one, was placed bottom up over the corpse, and the whole then covered with mats. The canoe was then raised up and placed on two parallel bars, elevated four or five feet from the ground, and supported by being inserted through holes mortised at the top of four stout posts previously firmly planted in the earth. Around these poles were then hung blankets and all the cooking utensils of the deceased, pots, kettles, and pans, each with a hole punched through it, and all her crockery ware, every piece of which was first cracked or broken to render it useless; and then when all was done, they left her to remain for one year, when the bones would be buried in a box in the earth directly under the canoe; but that, with all its appendages, would never be molested, but left to go to gradual decay.

In hunting, the Clatsops and adjoining tribes used old and poor muskets obtained from the traders, but principally a neat bow made of white cedar and of "great elasticity." The arrow was made in two parts, the main shaft, of pine, and the other and shorter part, which carried the barb, of hardwood. The former, after the arrow was expelled, and the barb, of iron, copper, or stone, had entered the object shot at, was easily separated and withdrawn from the victim and could then be used again. Pits and snares were also in common use for larger game.

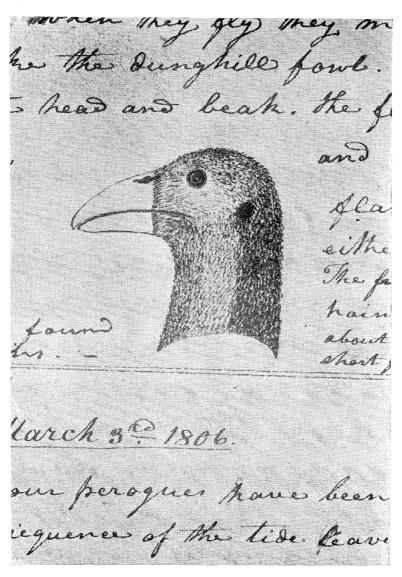
In fishing, nets of different kinds, depending upon the fish to be taken, were used, also gigs, or spears, and hooks and lines. The nets and the lines were made from the bark of the white cedar and from silk grass. The hooks were either made from bones or were obtained by barter from the traders.

I have already referred to the fact that Indians are not prone to give formal names to streams in the manner that we do. Lewis and Clark speak of Shocatileum, or Chocalilum as the name of the Columbia River. Regarding this, I wish again to quote from Silas B. Smith, who, as the grandson of old chief Cómowool, or Cóboway, and a man of education and intelligence, should have been able to speak with authority in such a matter.

They [Lewis and Clark] state that the Indians near Tillamook Head called the Columbia River "Shocatilcum"; that upon inquiry of them as to where they got the wappatoes, they gave this name, meaning the Columbia River. They entirely misunderstood the Indians' meaning. The wappatoes used here were obtained from Cathlamet Bay, above Tongue Point on the Columbia River. Shocatilcum was the chief of the Cathlamets; at that time his tribe was Shocatilcum's people, and when the Clatsops were asked where they got the wappatoes, they pointed over toward the Columbia and said "Shocatilcum," meaning only that they had got them from Shocatilcum's people. They had known of Shocatilcum for a long time and supposed everybody else knew of him, too.

I wish to state this proposition, which cannot be overthrown, that the Indians in this Northwest country, extending as far back as the Rocky Mountains, never name a river as a river; they name localities. That locality may be of greater or less extent, and they may say this water leads to such a place, or it will carry you to such and such a place, but never name a stream.

During February and March the elk and deer were gradually becoming leaner and scarcer and more shy. Fortunately, however, as these animals began to desert the lowlands the sturgeon and anchovies began to appear in the streams "and afforded us a delightful variety of food." The salt-makers were busy in the meantime, "but though the kettles were kept boiling all day and night, the salt was made but slowly," and it was the middle of March before there had been twenty gallons of salt made, twelve of which were packed in kegs to be used on the trip across the



Facsimile of Pen-and-Ink Drawing by Captain Lewis of the Cock of the Plains, "Centrocercus urophasianus." From Codex "J," Lewis, p. 107, Fort Clatsop.

mountains to the Missouri River caches, where they could replenish their supply.

This salt-boiling had been much more of an undertaking than they had bargained for, and nearly every man in the party, except the leaders and two or three of the best hunters perhaps, had assisted in the work.

A passage in the journal for March 22, 1806, reads:

Many reasons had determined us to remain at Fort Clatsop till the first of April. . . . About the middle of March however, we became seriously alarmed for the want of food; the elk, our chief dependence, had at length deserted their usual haunts in our neighborhood and retreated to the mountains. . . . 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.

We now have what may very aptly be described as an inventory of their poverty:

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 homeward.

Dr. Coues, in the Francis P. Harper edition of Lewis and Clark, gives us a much more elaborate and interesting diary of the events at Fort Clatsop during the last days preceding the departure of the party than Biddle gave. I venture to transcribe one passage from this edition.

Although we have not fared sumptuously the past winter and spring at Fort Clatsop, we have lived quite as comfortably as we had any reason to expect, and have accomplished every end we had in view in staying at this place, except that of meeting any of the traders who visit this coast and the mouth of the Columbia. . . . It would have been very fortunate for us if some trader had arrived before our departure; for in that case we should have been able to add to our stock of merchandise, and made a much more comfortable homeward-bound journey.

As already pointed out, an American brig had visited the locality, but apparently, the party never learned of this fact.

What a plight for the greatest expedition ever sent out by the American people to be in on the eve of starting for home, four thousand miles away!

Two handkerchiefs full of odds and ends for barter among many tribes, some of them keenly aware of the power which possession of indispensable articles of subsistence and transportation affords over starving and stumbling men!

Comment and criticism are superfluous, and yet it is not easy to see how this situation could have been prevented. Had it been attempted in the only way possible, by means of a supply ship sailing around Cape Horn, a grave politico-international dispute, or worse, might have been provoked, or incidentally, the vessel itself might have been wrecked. The North Pacific coast, at that time, was no man's land or every man's land, as one chooses to regard it; and for the Government itself to have attempted to do what Astor did a few years later might have been fraught with serious consequences.

Before commencing the return voyage it was absolutely necessary to procure another Indian canoe. But these were costly articles, worth a handsome daughter apiece, and the expedition was short of daughters, so far as the records show, at least of marriageable ones, and failure succeeded failure in the efforts made among the surrounding tribes. But, finally, on March 17th, Drewyer, who had been up among the Cathlamets on a trading expedition, returned



Along the Columbia River.

with one which some vain Indian had been tempted to exchange for Captain Lewis's "laced uniform coat and half a carrot of tobacco." They also "took a canoe from the Clatsops as a reprisal for some elk" which the latter had stolen from them during the winter.

They were now ready to leave Fort Clatsop, but stormy weather prevented them from caulking their canoes, and they delayed, hoping also that calm weather might come and thus enable them the more easily to double Point William—Tongue Point. During this time Shields put the firearms in good order.

The Indians came daily to bid them farewell. On the 22d of March Cómowool appeared to take leave of them. To this chief, the narrative records, they gave their houses and furniture. "He has been much more kind and hospitable to us than any other Indian in this vicinity. In the evening these Indians bade us farewell, and we never saw them again." Cóboway, to name him correctly, was also the recipient "of a certificate of the kindness and attention which we had received from him."

Before the fort was abandoned, not knowing what their fate might be on the return journey, and not having been able to apprise the President of their progress, they wrote a notice, and left several copies of it with Cómowool and others, posting one at their quarters also, hoping that one of them might fall into the hands of the master of some trading vessel and thus reach the United States, in order that the world might one day learn of them, and their movements be at least partially established should they be cut off or perish. One of these notices did thus eventually reach Philadelphia by way of China, as has been noted, but not until the expedition had itself reached the States in safety. This paper, taken literally from the Lewis codex containing it, reads as follows:

these lists of our names we have given to several of the natives and also paisted up a copy in our rooms. the object of these lists we stated in the preamble of the same as follows (viz) "The object of this list is, that through the medium of some civilized person who may see the same, it may be made known to the informed world, that the party consisting of the persons whose names are hereunto annexed, and who were sent out by the government of the U'States in May 1804. to explore the

interior of the Continent of North America, did penetrate the same by way of the Missouri and Columbia Rivers, to the discharge of the latter into the Pacific Ocean, where they arrived on the 14th of November 1805, and from whence they departed the [23d] day of March 1806 on their return to the United States by the same rout they had come out." On the back of some of these lists we added a sketch of the connection of the upper branches of the Missouri with those of the Columbia, particularly of it's main S.E. branch, on which we also delienated the track we had come and that we meant to pursue on our return where the same happened to vary.

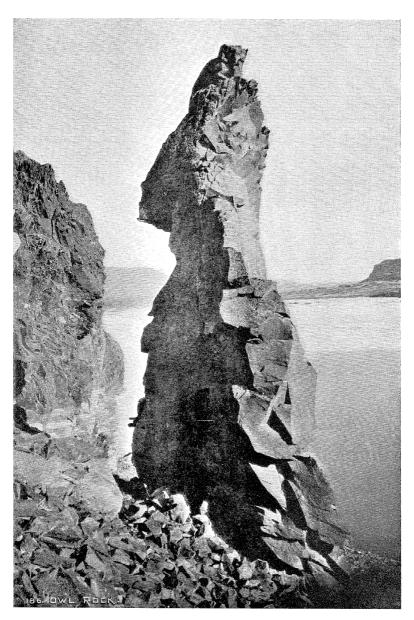
As the Columbia in 1805–06 was a great water-way for the savage, so to-day it is for the men of civilization. The villages of the Indians, filled with vermin, have vanished almost utterly, and the towns of the palefaces have succeeded them. The canoes of the red men are rotted and gone and the electric-lighted floating steam palaces of the whites now plough the waters of the great river. Upon the broad bosom of the stream and its affluent, the Willamette, there is now carried on a vast commerce, not alone provincial, but world wide in its scope, and the ships of all nations cast their anchors in their waters.

Along the banks of these streams the trains of four railways speed, and two cities, Portland and Astoria, adorn the heights where Lewis and Clark saw naught but gloomy forest.

The bar of the Columbia has been largely shorn of its early terrors, and lighthouses now throw their beams across its boiling waters to guide the mariner to port. But otherwise the great mountains and the river are much as they were a hundred years ago.

The putative discovery of the Columbia, Achilles of rivers, was on May 11, 1792,—only thirteen years before Lewis and Clark were there,—by Captain Robert Gray of Boston

Gray, in his ship, the Columbia, had, in 1791, observed



Owl Rock, on the Columbia River.

the estuarian mouth of the river and concluded that it was such, and in 1792, returning to investigate, sailed across the bar and up the stream some fifteen or twenty miles, thus making supposition absolute certainty and—DISCOVERY. Others had seen this opening before Gray did, but concluded that it was simply an inlet of the sea. Heceta, a Spaniard, in 1775 saw the broad bay, and it was afterwards shown on Spanish maps as Entrada de Heceta and Rio San Heceta called the promontory now known as Cape Disappointment Cape San Roque, but made no effort to cross the bar and explore the river. Meares, an Englishman, in 1788 sailed over the bar, anchored in what is now Baker's Bay, to which he gave the name Deception Bay, satisfied himself that no fresh water stream existed, gave a new name, Cape Disappointment, to the bold northern headland, and sailed away. Gray seems to have intuitively felt that the river was there, so when he successfully navigated the breakers he sailed away up the broad estuary until he found that he was right, thereby became the real discoverer, and then gave to the mighty river the name Columbia, after the ship which first fairly floated upon its tidal current, and upon this discovery and name hinged momentous results.

We are most of us familiar with those lofty, sonorous lines from Bryant's *Thanatopsis*:

Where rolls the Oregon and hears no sound Save its own dashings,

in which the word Oregon is applied to the Columbia.

Captain Jonathan Carver of Connecticut, in 1766, explored the Northwest by way of the Great Lakes. In his account he frequently mentions the river *Oregon* and lays it down approximately correct, from a geographical standpoint, as applied to the Columbia. Maximilian also used the word in the same way. Carver gave no explanation of the

word, its derivation, meaning, etc., and the presumption that it was an Indian word cannot be substantiated. Greenhow maintains that it cannot have come from the Spanish *Oregano*, or *Orejon*, and that it was probably a pure invention of Carver's. Others have suggested that it was a corruption of the Spanish *Aragon*, and was the name given to both river and country by the Spaniards about the time Carver was engaged in exploration, from a fancied resemblance to Aragon in Spain. Be all this as it may, historians are ignorant as to the origin of the word beyond knowing that it was first used by Carver, and the name Columbia easily supplanted Oregon as the name of the river.

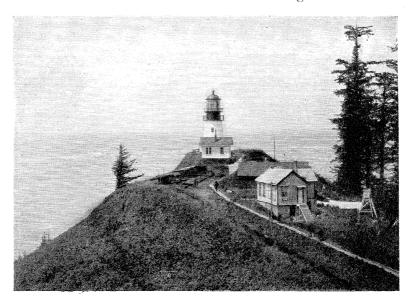
The river is some 1200 to 1400 miles long, and drains a basin or basins aggregating 400,000 or 500,000 square miles. Oregon, Washington, British Columbia, Idaho, Montana, Wyoming, Utah, and Nevada all contribute to swell its swirling flood. The river is easily navigable for ocean-going steamers and ships to beyond its junction with the Willamette, and ocean steamers go up the latter river as far as Portland, which is on the Willamette, not on the Columbia.

On the broad bay which Lewis and Clark faced when camped on the south side of Point William during those stormy days in 1805, Astoria, the historical city, and the child of John Jacob Astor's brain and purse, now stands. Five years, almost to a day, after our explorers left Fort Clatsop, Astor's ship, the *Tonquin*, crossed the Columbia River bar to found Astoria.

On Cape Disappointment, at Point Adams, and near Comcomly's old Chinook village, there are now modern Government defence batteries and fortifications. At Point Adams, also, the Government has constructed a jetty system, now in process of extension, to improve the navigation across the bar.

The tourist and traveller to Portland and the North Pa-

cific coast should visit Astoria, Fort Canby, and the Cape Disappointment lighthouses, and from the latter enjoy the ocean view. Standing beside the old lighthouse, in the south distance the Government jetties are faintly seen in outline; to the west, five miles out at sea, the lightship, more dimly still, is seen, while below us and stretching across to the



The Old Lighthouse at Cape Disappointment, Mouth of Columbia River.

One hundred years ago vessels crossed the bar just to the left

of the lighthouse.

jetties and to Point Adams, the Pacific surges come tumbling over the bar in boiling, whitening, maelstromic fashion, forming currents, cross-currents, eddies, and whirlpools, and the spray, as the surf thunders against the base of the rock on which we stand, is dashed high up over the lighthouse.

Long Beach, north of Cape Disappointment and on the Washington coast, and Flavel, Clatsop, and Seaside, across the river in Oregon, are summer seaside resorts, easily reached by river steamers and railway trains. The ocean beaches are clean and hard, and there are few Atlantic coast resorts having finer beaches than are found here.

Captains Lewis and Clark both explored Long Beach in those reconnoissances of theirs from Chinook camp, and the salt cairn is found near Seaside, on the Oregon side.

The whale which Captain Clark and Sacágawea saw at Nehalem Bay was not the last of the species to appear here. They not infrequently attract much attention now by their clumsy, sportive antics and spoutings, and it is not an uncommon occurrence for a stranded whale to be found along these beaches.