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I.

THE JESUP NORTH PACIFIC EXPEDITION.

III.—Archæology of Lytton, British Columbia

By HARLAN I. SMITH.

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III.—ARCHÆOLOGY OF LYTTON, BRITISH COLUMBIA.

BY HARLAN I. SMITH.

PLATE XIII.

Lytton is situated at the confluence of the Thompson and Fraser Rivers, in southern British Columbia. Below Lytton the Fraser River breaks through the Coast Range, forming a deep cañon, while above Lytton it flows through the plateau which extends from the Coast Range to the western range of the Rocky Mountains. The climate of this area is rather dry, and consequently the vegetation is somewhat scanty. The higher parts of the country are covered with open timber. The Indians inhabiting this area at the present time subsist largely on fish, of which there is an abundant supply in the rivers, particularly at the time when the salmon ascend to spawn; but fish is not by any means as important a staple as it is among the tribes of the coast. Roots and berries, which are gathered on the hills, form an important part of the diet of the people, who also hunt deer and bear, on which they subsist when living at a distance from the rivers.

On account of the importance of the fish diet, the more permanent villages of the Indians are located on the larger rivers, principally on the Fraser and Thompson. Places on the banks of the river which are not too far removed from berrying and root-digging grounds are the favorite resorts of the Indians. Lytton is most favorably located for all these pursuits, and consequently it has always been an important village. Evidently the same conditions prevailed in prehistoric times, as is shown by the extensive remains of villages and the large burial-grounds found at this place.

A large burial-ground on the point of land between the Fraser and Thompson Rivers has long been known. It was first described by Dr. George M. Dawson, who investigated it while engaged in geological work in southern British Columbia during the years 1877 and 1888-90.¹ The collections made by Dr. Dawson are in the Museum of the Geological Survey of Canada. The botanist Diercks, while studying the flora of this country, collected a number of fine stone carvings, principally from the region below Lytton. These are now in the Royal Ethnographical Museum at Berlin. In the Provincial Museum at Victoria, B. C., and in various private cabinets of antiquities, are several small collections, the results of casual visits to the old burial-place near Lytton. The specimens from similar sources which were preserved in the City Museum of New Westminster, B. C., were totally destroyed by fire in 1898.

¹ Transactions of the Royal Society of Canada, Section II, 1891, pp. 10-12.

In July, 1897, the Jesup North Pacific Expedition made a series of explorations in this vicinity. The following descriptions are based upon these explorations, which were carried on by the writer. The accompanying illustrations are from drawings by Mr. R. Weber. In the field, assistance was rendered by Mr. Charles Hill-Tout of Vancouver, who for many years has been much interested in the antiquities of British Columbia, and whose 'Later Prehistoric Man in British Columbia,'¹ is the first *résumé* of British Columbian archæology. Mr. J. J. Oakes assisted in excavating, and explored the graves which he discovered on a Chinaman's ranch, finding several important specimens.

The explorations were largely confined to the main burial-place and village-site, situated on the sand-hill that is found along a terrace between the cañons of the Fraser and Thompson Rivers and immediately to the north of their confluence (Plate XIII). This is by far the most important site near Lytton. The hill is about a hundred feet above the river, and is approximately five hundred feet in length by two hundred feet in breadth. A large pine-tree is growing on the crest of the hill, in the middle of the burial-place. An Indian trail passes to the west of the area, and the government road bounds it on the east. No definite age can be assigned to any of the remains secured, as the wind, which sweeps strongly up the cañon of the Fraser River, is continually shifting the light, dry sand from place to place. It uncovers the graves, disarranges them, and sometimes re-covers the remains. Miners and Indians often camp at this site; and the objects left or lost by them are scattered on the surface, and often covered by the blowing sand. All these objects must be distinguished from the undisturbed burials of the prehistoric people. The surface is strewn with human bones which have been uncovered by the wind. There are also scattered about shell beads, wedges made of antler, scrapers and chipped points of stone such as are used for arrows and knives, grinding-stones, celts, and other material similar to that found in the graves. There is a large box at this place, in which the Indians deposit the bones and objects as they are uncovered by the wind, but sometimes they bury them. The bones they consider to be those of Indians, although they do not know whether they are of their own ancestors or not. It is reasonably certain, judging from the complete absence of European objects in the undisturbed graves, that they antedate contact with the whites. A number of them must be several hundred years old.

Extending to the north from the hill, and on the same terrace, were found old hearths, indicated by broken and crackled firestones, large slabs of grinding-stones, and remains of underground houses. A few human bones were secured from the edge of a gravel-pit made by miners near an Indian cemetery known to be modern by the portions of the fence which still remain.

Southward from the sand-hill, on the level of the terrace, were found traces of similar hearths, charcoal, and rolls of birch-bark partly burned. Here were also remains of underground houses. There were two large boulders which the

¹ Transactions of the Royal Society of Canada, Second Series, Vol. I, Section II, 1895, pp. 103-122.

Indians report were used in the ceremonials performed by young men or by youths when reaching maturity. It is said that these youths were required to cover the distance from one boulder to the other in a prescribed number of leaps.

About half a mile below Lytton, on the high gravel terrace on the left bank of the Fraser River, was found a second village-site. The Canadian Pacific Railroad cuts through the western portion of this terrace, which is considerably higher than the one upon which the town of Lytton is located. Scattered over the surface of the wind-swept sands are numerous evidences of former habitation; such as chips of glassy basalt, burned and crackled firestones, and the carved stone object, apparently of foliaceous steatite, shown in Fig. 1. The use of this object is undetermined.



Fig. 1 ($\frac{18}{33\frac{1}{2}}$). Stone Object. Found on surface, 2d site. Nat. size.

A third village-site was located on the high terrace on the left bank of the Fraser River, about two miles north of Lytton. The place is a meadow in an open pine forest east of the government road. South of it is a small brook, ending lower down in a marsh. This may have determined the location of the site, since it affords a supply of fresh water high above the Fraser River. Here were remains of a large number of underground houses, apparently very old, as none of the house-timbers remained. Scattered about near them were chips of glassy basalt, rubbed stones, and skin-scrapers made of stone.

There are a number of recent graves on a lower terrace between this village-site and the Fraser River, the little cemetery lying on a cultivated ranch between the government road and the river. At this point the Fraser has cut into the terrace, forming a steep bluff. Three wooden grave-posts carved to represent human beings, and a rifle, marked the place. Several remains of underground houses were found in the vicinity. These houses were probably more recent than those on the higher terraces, as the pits and embankments were less levelled by the action of wind and water. Near them were found points chipped from glassy basalt, stone pestles, and rubbed stones. About two miles farther up-stream, on the verge of the high bluff overlooking the Fraser, and nearly opposite the mouth of Stein Creek, a fourth site was found. Here there were many remains of old houses, rubbed stones, and other evidences of a prehistoric village.

A fifth ancient village and a burial-place were located at the north side of the mouth of Stein Creek, which empties into the Fraser River from the west, at a point about four miles above Lytton. This place is on the table-land overlooking the Fraser River, and near the cemetery of the present Indian village of Slame. Here were human bones, fragments of pecten shells (probably parts of pendants or rattles), fragments of steatite pipes, and wedges of antler, scattered by the wind. On the lower terrace, close to Stein Creek, are remains of ancient houses which measure from fifty to sixty feet in diameter.

Some attention was given to a sixth site, which is marked by burials and traces of habitations on the low sandy terraces on the west bank of the Fraser

River, about opposite the main burial-place (Plate XIII). These remains extended nearly a mile to the north, and included several house-pits on the ranch of Mr. Earl, nearly a mile above Lytton. These pits were from fifty to fifty-five feet in diameter, and five feet deep, measuring from the top of the ridge. Human bones, chipped points of glassy basalt, rubbed stones, and other implements were found in the sides of miners' pits; and several complete burials were found on a ranch cultivated by Chinamen, nearly opposite the main burial-place. These sites may or may not have been occupied at the same time.

All through this region are evidences of prehistoric habitations, located at varying distances from the larger village-sites. This suggests that the mode of life of the prehistoric people was similar to that of the present Indians, among whom one or two families often live at some distance from the main villages.

Resources. — The resources of the prehistoric people of Lytton, as indicated by the specimens found in the graves, hearths, and about the village-sites, were chiefly stone, copper, shell, bone, antler, teeth, the skins of animals, and vegetable substances.

They employed extensively various kinds of stone for making a large variety of objects. Quartzite pebbles were used for scrapers, hammers, and similar objects. Quartz crystals were found in the sites, and may have been used for drills and charms. Argillite was made into fish-knives, points for arrows, etc. Glassy basalt, agate, chalcedony, and yellow, red, and green jasper were used for various kinds of chipped implements. The material commonly employed for the chipped objects, however, was basalt. Steatite was made into pipes, perforators, etc. Sheets of mica were made into pendants.

Green stones of various degrees of hardness and shades of color were used extensively for celts. Professor James Furman Kemp, of Columbia University, has identified the specimens shown in Figs. 40-46. He says:—

"Thin sections for microscopic study were prepared of each, and specific gravities were determined of each. Sections were also prepared, for comparison, of jades from China, Siberia, New Zealand, and of jadeite from Thibet.

" $\frac{1.6}{2.911}$ [Fig. 45] and $\frac{1.6}{2.912}$ [Fig. 44] are apparently the same material. They are dark green, and have specific gravities of 2.657 and 2.655 respectively. These values are too low for jade [nephrite] or jadeite. I believe the investigations conducted by Dr. William Hallock for Mr. H. R. Bishop have placed 2.90 as about the lower limit for true characteristic jade. Both specimens consist of aggregates of small fibres, of about 0.1 mm. in length and a fraction as wide, say 0.02 mm. They have parallel extinction between crossed nicols, and an axis of least elasticity parallel to the elongation. $\frac{1.6}{2.911}$ behaves like serpentine, giving low polarization colors, such as grays; but $\frac{1.6}{2.912}$ is brighter, and is rather active for serpentine. The rock is certainly not jade. Its hardness is not too great for the upper limits of serpentine. Some black magnetite is present in $\frac{1.6}{2.912}$.

" $\frac{1.6}{2.971}$ [Fig. 40], $\frac{1.6}{2.986}$ [Fig. 41], $\frac{1.6}{3.080}$ [Fig. 46], and $\frac{1.6}{3.113}$ [Fig. 43], all fulfil the optical and physical tests for jade. They are fine felty aggregates of

minute rods with extinction angles up to 15° . The specific gravities are those of typical jade: viz., $\frac{16}{2971}$, 3.011; $\frac{16}{2988}$, 2.985; $\frac{16}{3080}$, 3.014; $\frac{16}{3113}$, 3.010. They resemble Chinese jade in microscopic characters.

" $\frac{16}{2994}$ [Fig. 42] resembles in structure and optical properties the four just referred to, and looks just like them. Its specific gravity is, however, lower than the values obtained for the others, and is 2.879. This is not a serious difference, but some lighter foreign mineral may be present, although not detected in the thin section. I believe the implement to be jade."

Tons of green stones were seen along the Fraser and Thompson Rivers in this vicinity. The parent outcrops are said to be in a creek tributary to the Fraser River, some miles above Lytton.

Siliceous sandstone of a rather coarse structure was used for making smoothers for arrow-shafts, for stones for grinding grooves in serpentine in order to cut it into convenient forms for implements, and for grinding-stones. Copper clay was used for blue paint; and white calcareous and yellow earths and red ochre, for paint of those respective colors.

Of the source of the red ochre, Dr. Dawson,¹ in his 'Notes on the Shuswap People of British Columbia,' writes as follows:—

"There are within the country of the Shuswaps three notable and well-known localities from which red ochre for paint was derived. One of these, named *Skwō'-kil-ow*, is situated on the east side of Adams Lake, five miles from the lower end of the lake. Another, named *Tsul'-a-men*, or 'red paint,' is the remarkable red bluff from which the Vermilion Forks of the Similkameen River is named, the name of the north branch, Tulameen, representing the Indian word just quoted. This bluff is about three miles above the Forks. The third locality is on the Bonaparte, not far above the mouth of Hat Creek. This has not been precisely identified nor was its name ascertained.

"The paint-producing locality on Adams Lake is still widely known among the Indians, and is said to have been resorted to from time immemorial. There is here near the beach a shallow cave, which has evidently been somewhat enlarged if not altogether formed by digging for ochre. It is hollowed along the strike of some soft pyritous schists, kept damp by springs, and in which the decomposition of the pyrites produces an abundance of yellow ochre. This is collected and burnt, when it assumes a bright red colour. A black shining mineral was also used in old times to paint the face. This was either micaceous iron or graphite, probably the former. My informant did not know whence it was obtained, but several places from which either mineral could be got are now known."

Copper was made into various objects. Evidently it was much used for ornaments, such as bracelets (?) and anklets (?), and for the decoration of clothing, as indicated by the copper stain on human bones, elk-tooth beads, and dentalium shells. The copper may have been obtained from the mountains north of Lytton, where native copper occurs.

¹ Transactions of the Royal Society of Canada, Section II, 1891, p. 17.

Many evidences of the association of animals with man were found. While it may be that some of the animals whose remains are found in the village-sites and burial-grounds did not live with the people, having taken up their abodes in these places after they had been deserted, numerous worked and broken bones and teeth show that the animals to whom they belonged must have been useful to the prehistoric inhabitants of Lytton.

Bones of food animals, such as the deer, black bear, birds, and fish, were found with the remains in the village-sites. When the salmon come up the river from the ocean to spawn, they swim in such immense schools that they are easily dipped out with a hand-net. Their bones, frequently found in the old hearths, indicate the use of this fish for food. Shells of the unio were too rarely found to indicate its use as common food. The mountain-goat,—whose flesh is excellent, and from the wool of which the Indians on the lower part of Fraser River still make blankets,—as well as other game, is yet plentiful in this region ; and although its bones were not found, it was probably used for food, and its wool may have been spun (see p. 146). The jaw-bone of a dog found on the surface of the sixth site may have been brought there since contact with the whites, as there was no proof of the age of this surface specimen.

Bone of deer and other animals was made into awls, scrapers, adzes or chisels, needles, pendants, knife-handles, etc. No points made of bone, that were suitable for arrows, were found. Teeth of the elk and of small carnivorous animals were used for beads or pendants. Woodchuck-teeth were made into dice, and beaver-teeth into points for knives. Antler was made into wedges, harpoon-points, handles to digging-sticks, war-clubs, and daggers, and was carved into various figures. The skins of animals were made into garments, portions of which were found preserved by the dry climate and the action of copper salts. Bones of the deer, bear, puma, wolf, beaver, woodchuck, and weasel indicate the possible use of fine skin garments. Unio shells were made into spoons ; and dentalium shells from the Pacific Ocean, into beads and tassels. Little olivella shells with the spires broken off also served as beads. Large shells (*Pecten caurinus*) were perforated for pendants or rattles, and pendants were also made of abalone shell.

The present Indians of this area used dentalium shells, which are not imported along the Fraser River, but from the region north of Vancouver Island, over the mountains, down to the upper course of the Fraser River. The trade in these shells is in the hands of the Chilcotin, an Athapaskan tribe of western British Columbia. It is probable that in prehistoric times dentalium shells found their way to Lytton over the same route. It seems at least that the use of dentalium shells was much more extensive in the interior than it was in prehistoric times in the delta of the Fraser River.

Vegetable substances include charred pieces of wood from the hearths, and other charred fragments which had probably been portions of canoes, sticks, etc., that were found in various parts of the village-sites. Pieces of wood were found wrapped in copper, and preserved by the action of the copper salts, the whole be-

ing probably an ornament of some sort (see p. 160). Birch-bark charred, or preserved by the dryness of the climate, was found in the graves as lining or covering, and in the form of rolls. Probably it was also used for dishes. Charred berries, including bearberry (*Arctostaphylos*), were found in the hearths; and to this day edible roots are plentiful in the vicinity. That they were dug for food is suggested by the presence of the digging-stick handles. The seeds of a western species of *Lythospermum*, which may have been used for food, were frequently found in the hearths; and large numbers of them were sometimes over the skeletons in the graves, as if that plant had been used as a covering for the bodies. A kind of gum that was found in a clam-shell spoon and on a bone handle for a stone knife resembles that from the fir and pine. Woven fabric of vegetable fibre, possibly sagebrush bark, and portions of string made of the bark of red cedar (*Thuja gigantea*), were found in the graves.

Hunting and Fishing; Digging Roots. — Many implements used in procuring food were found. By far the most numerous were chipped points for arrows,

knives, and spears of various sizes and shapes. Varieties of these are represented in Figs. 2–8, those of the type shown in Fig. 6 being the most numerous. The material commonly used for chipped points is glassy basalt. Practically all the smaller implements are made of this material. An

unusually large

number of fantastic forms of small chipped objects were found here (Figs. 8–13). These are of the same material as the other small points. The specimens shown in Figs. 14–19 were collected by Mr. J. D. King, of Kamloops, B. C., in 1891, and presented to the Provincial Museum at Victoria. They resemble specimens found at Lytton. In the work of the Jesup Expedition such extremely fantastic points were not found at Kamloops. The large point of translucent brown chalcedony shown

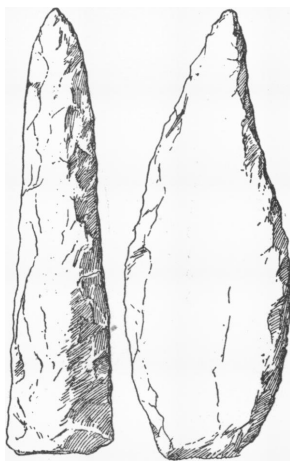


Fig. 2 Fig. 3
Chipped Points. $\frac{1}{4}$ nat. size.

Fig. 2 ($\frac{1}{4}$ nat. size). Impure Chalcedony, with Broken Base. Found in excavating.

Fig. 3 ($\frac{1}{4}$ nat. size). Argillite. Found in grave, 14 feet deep.



Fig. 4

Fig. 5

Fig. 4 ($\frac{1}{4}$ nat. size). Chipped Argillite daubed with Red Paint. Found in grave. $\frac{1}{4}$ nat. size.

Fig. 5 ($\frac{1}{4}$ nat. size). Chipped Point. Found on surface, 6th site. $\frac{1}{4}$ nat. size.

in Fig. 5 is one of the most beautiful chipped implements found, and represents a high development of this art. The small implements of chipped glassy basalt shown in Figs. 8-13 also furnish evidence of considerable skill. It is remarkable that no rubbed stone points for arrows or spears, such as are numerous on the coast, were found, although rubbed fish-knives are quite common, and one rubbed slate point was obtained at Kamloops, ninety-five miles above Lytton in the Thompson valley.

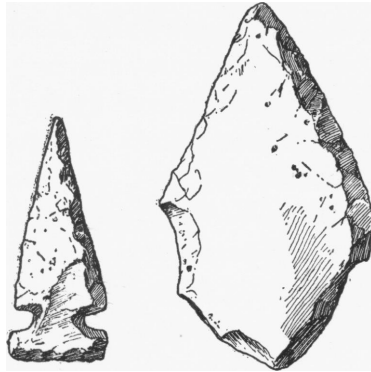


Fig. 6
Chipped Points of Glassy Basalt. $\frac{1}{2}$ nat. size.
Fig. 6 (31172). Found in grave.
Fig. 7 (31173a). Found on surface, in unfinished state.

The edges of the specimens seen in Figs. 2, 3, and 5 are smooth. The specimen pictured in Fig. 2 also shows a polish on the ridges made by chipping. In the other two, the edge of that part which one would expect to be covered by a shaft or handle is smooth; and the jagged edge at the point of the one shown in Fig. 5 is very much rounded. If this smoothness had been caused by the blowing sand after the shafts had rotted away, or by the natural disintegration of the stone, it would have extended over the whole surface.

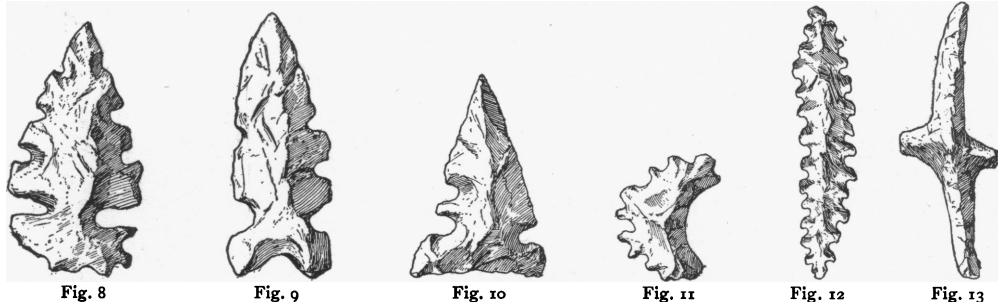


Fig. 8
Fig. 9
Fig. 10
Fig. 11
Fig. 12
Fig. 13
Fantastic Forms chipped from Glassy Basalt. Nat. size.
Fig. 8 (31182). Daubed with red ochre. Found on surface.
Fig. 9 (31183a), Fig. 10 (31183), Fig. 11 (31184), Fig. 12 (31185), Fig. 13 (31187). Found in excavating.

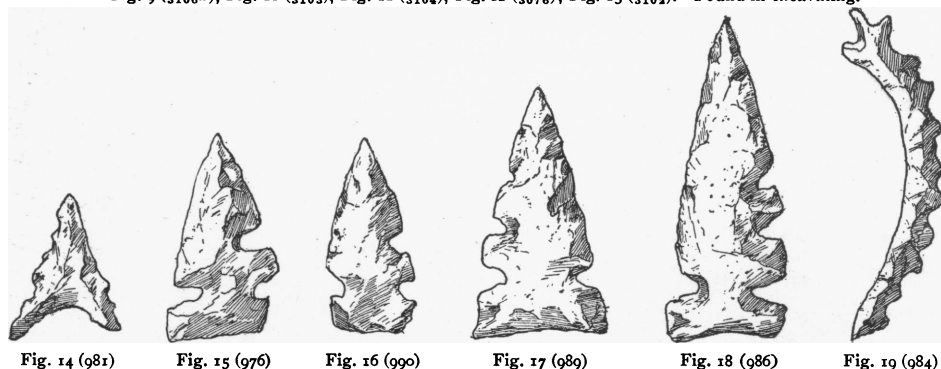


Fig. 14 (981)
Fig. 15 (976)
Fig. 16 (990)
Fig. 17 (989)
Fig. 18 (986)
Fig. 19 (984)
Fantastic Forms chipped from Glassy Basalt. $\frac{1}{2}$ nat. size. Lytton or Kamloops.
(From drawings, by Miss E. H. Woods, of specimens in the Provincial Museum, Victoria, B. C.)

The Indians now living in the valley of the Thompson River, near Lytton, still possess the art of chipping small stone arrow-points. To obtain the basalt

they make journeys up the mountains, where they break it fresh from the quarry, in which state they claim that it can be worked more easily than the material sometimes obtained by breaking up the large chipped points found in the vicinity. These they believe were made by the raven before there were men on the earth, and they call them "raven arrows." Thus it would seem that at least the large points were not made by the last few generations of the present tribe of Indians.



Fig. 20 ($\frac{1}{3}$ nat. size). Harpoon-Point, made of Antler. Found in excavating.

tion of the specimen figured was stained, and better preserved than the rest of the implement, as if it had been protected by a handle extending about half-way to the first barb. The perforations in both specimens were elliptical, as if they had been cut instead of drilled, and did not seem to be worn, as by a thong passing through them. The butt-end may have been inserted in the handle and a string attached through the hole, so that when an animal was speared the point would come out of the handle, but the animal would be held by the string. This would tend to wear the hole in a direction away from the barbs. In one specimen the hole is very close to the base, so that to fasten it to a handle, leaving the hole free for a string, would be difficult. In this case the base need not be wedge-shaped beyond the hole, as in the figured specimen. However, the axis of the elliptical hole extends diagonally in the direction of the barbs. Possibly these points may have been inserted quite a distance into the handle, and fastened there by a rivet, but there is no trace of such a rivet. In the latter case the wedge-shaped base extending far up the shaft would facilitate fastening it firmly.

It is probable, although there is no direct evidence, that traps of various kinds were used for catching some of the small animals whose bones were so abundant in the excavations.

For gathering edible roots the natives now use digging-sticks. The handle

Two harpoon-points of the type shown in Fig. 20, made of antler, were found. Each point had two barbs on one side; and the base, which was slightly wedge-shaped, was perforated. This por-



Fig. 21a

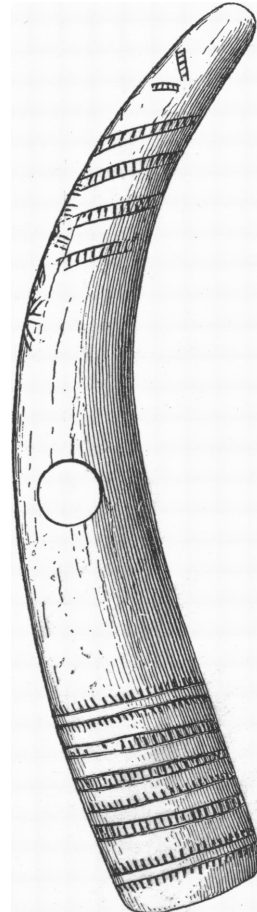
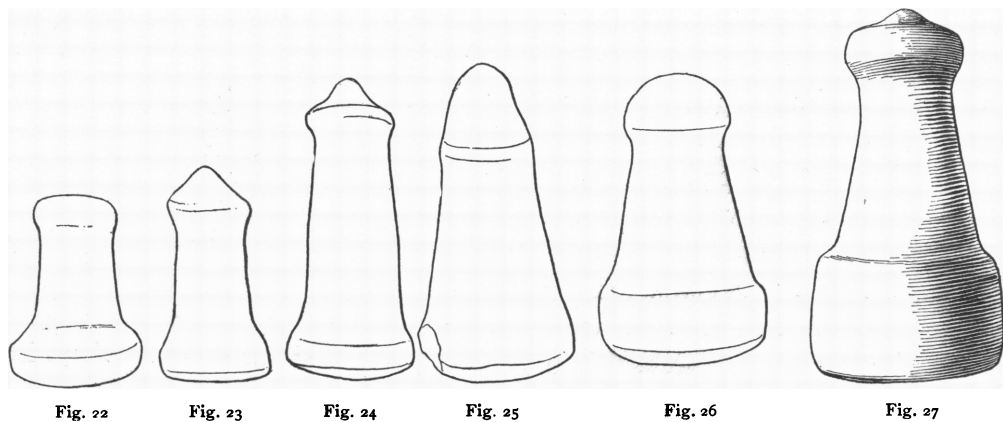


Fig. 21

Fig. 21 ($\frac{1}{3}$ nat. size). Handle of Digging-Stick, made of Antler. Found on surface, 6th site. $\frac{1}{3}$ nat. size.

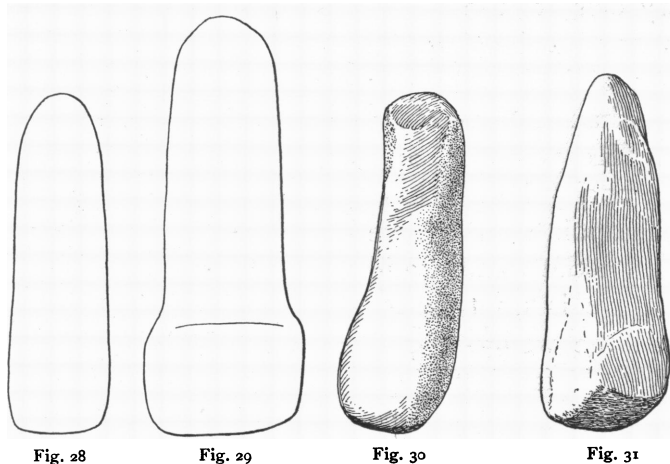
Fig. 21a. Reverse Side of Tip.

of such a stick is usually a piece of bone, antler, or wood, perforated in the middle for receiving the butt of the digging-stick. A handle of this kind (Fig. 21) was found on the surface of the sixth site. It is made of part of an elk-antler, but slightly changed from the natural form by scraping or rubbing. The perforation, which is not exactly circular, has been worn down to an elliptical shape, probably by the rubbing of the digging-stick when in use. It is of conical shape, so that it would hold the stick the more firmly, the harder the downward pressure in digging. The small end of this tapering hole is at the top or decorated surface of the handle, and the large end is below.



Stone Pestles or Hammers. $\frac{1}{4}$ nat. size.
 Fig. 22 ($\frac{1}{2}$ 118a), Fig. 23 ($\frac{1}{2}$ 118b). Made of Dioritic Rock. Found on surface. Fig. 25 ($\frac{1}{2}$ 118c). Found on surface, 6th site.
 Fig. 24 ($\frac{1}{2}$ 118d). Made of Serpentine. Found in grave, 1½ feet deep. Fig. 26 ($\frac{1}{2}$ 118e), Fig. 27 ($\frac{1}{2}$ 118f). Found on surface.

Preparation of Food. — Pestles or hammers (Figs. 22–31) served for crushing dried meat, berries, and other food. They are of various shapes, made usually



Stone Pestles or Hammers. $\frac{1}{4}$ nat. size.
 Fig. 28 ($\frac{1}{2}$ 119a), Fig. 30 ($\frac{1}{2}$ 119b), Fig. 31 ($\frac{1}{2}$ 119c). Found on surface.
 Fig. 29 ($\frac{1}{2}$ 119d). Found on surface, 6th site.

from fine-grained, tough river pebbles, and many are much weathered. Some are simply cylindrical, in which case they are usually but slightly changed from the natural pebble by a little pecking or rubbing. One quartzite specimen (Fig. 29) has a cylindrical head, and the part by which it is held is narrower and somewhat tapering. The whole pestle is slightly flattened.

The typical pestle of Lytton has a well-defined head, larger than the tapering body, the sides of which meet the base at nearly right angles, as is shown in Figs.

23, 24, and 27. The prevailing form of knob for the handle of this type is hat-shaped. A specimen with conoid knob is shown in Fig. 25. The pestle shown in Fig. 30 is simply a natural water-worn pebble of dark-green, fine-grained chloritic diorite, which has been trimmed here and there by pecking. These pestles seem to have been used for rubbing as well as for pounding. One of them, a fine-grained schistose gneiss (Fig. 31), shows no evidence of having been used for pounding, but its corners and base are rubbed smooth.

Oval boulders were frequently seen scattered on the surface of the village-sites. Their predominance over other forms, and their great numbers as contrasted with their scarcity at other localities, seem to indicate that they were of special value in camp. Their size varies from that of an ordinary hammer-stone to a foot in diameter. The larger ones were most likely used as anvils, or for crushing food upon large hand-mills. Some of the larger and more irregular boulders, such as the greenstone specimen shown in Fig. 32, have a shallow depression pecked in one side, indicating their use as shallow mortars or anvils.

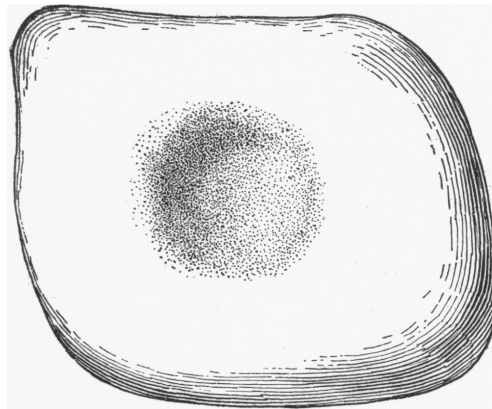


Fig. 32 ($\frac{1}{8}$ nat. size). Mortar or Anvil. Found on surface. $\frac{1}{4}$ nat size.

Large flat pieces of coarse siliceous sandstone were found, which were probably hand-mills upon which to crush berries, dried meat, and other food. They

show considerable wear. The one seen in Fig. 33, which is rubbed on both sides, is twenty-five inches in length by fourteen inches in breadth, and an inch and a half in thickness. Smaller pieces are frequently found. They are similar to this large specimen, and are probably fragments of such slabs. When an object of this kind was broken, some fragments

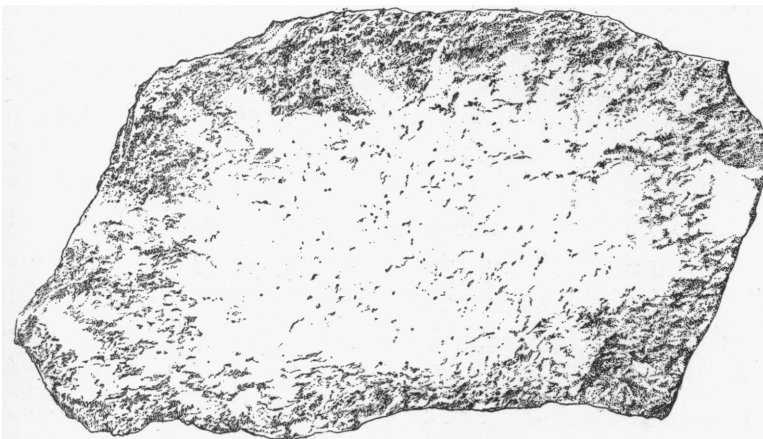


Fig. 33 ($\frac{1}{8}$ nat. size). Rubbed Sandstone Slab. Found on surface. About $\frac{1}{4}$ nat. size.

may have been used as whetstones or for grinding; others were worked to a rounded or wedge-shaped edge (Fig. 47), and used for cutting serpentine boulders, out of which many implements were made.

Slate knives were discovered in excavating graves and hearths. They are similar in form to those now used on the coast for cutting up fish. The specimen shown in Fig. 34 was found in a cache of implements at the side of a skeleton, in a grave a foot and a half deep, at the main burial-place. Several rubbed places

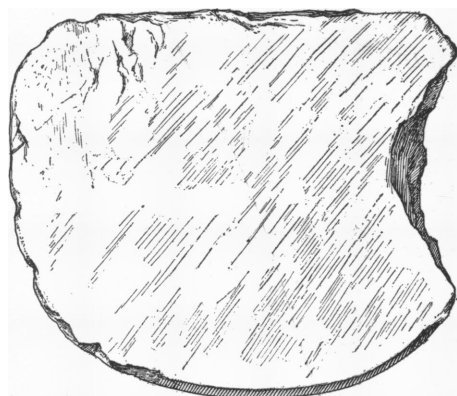


Fig. 34 (7882). Slate Fish-Knife. Found in cache in grave, 1½ feet deep. ½ nat. size.

show on its flat surface, caused perhaps by its use as a whetstone. Stains along the straight edge on both sides probably indicate the position of a handle that has rotted away. A bone handle of the kind found on the coast would have been well preserved in this dry climate.

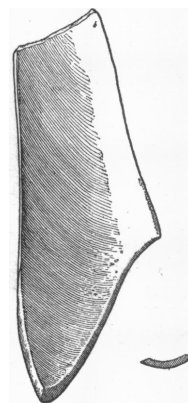


Fig. 35 (3887). Clam-shell Spoon, daubed with Gum. Found in grave. ½ nat. size.

A spoon (Fig. 35) made from the shell of a unio was found in one of the graves.

It was the only spoon-like object discovered, and was partly filled with a gum resembling that from the pine of the neighborhood.

Food was probably cooked by roasting before an open fire, by baking or steaming in a hole in the ground, in which it was placed and covered with leaves and ashes, and also by boiling. The last is accomplished by dropping hot stones into baskets or boxes containing the food to be boiled. No pottery is found in this region; but many pebbles, that may have been heated and dropped into the basket, are found here and there about the village-sites; and great piles of soot-covered pebbles, and others that have been broken and crackled by means of heat and subsequent plunging into water, are found scattered over the village-sites and in the hearths. In some places the hearth-sites are marked by little conical piles of sand, held in place by quantities of these sooty and crackled pebbles.

Habitations. — The houses of the prehistoric people of Lytton were similar to those used by the Indians up to recent times. This is evident from the large number of ancient house-pits at all of the sites explored.

The Thompson River Indians, who inhabit this area at the present time, used to live in underground lodges. This lodge is made by digging a circular hole in the ground, and erecting over it a framework of timbers shaped like a cottage roof. These timbers are covered with fir-boughs and earth. Since there is but little rain, a roof of this kind offers sufficient protection. An opening is left in the centre to serve not only as a chimney and window, but also as a door. A notched log — one end resting on the middle of the floor, the other projecting from this opening — serves as a ladder, and constitutes the only means of entering the house.

When one of these houses goes to ruin, the circular pit is partly filled, but not enough to be entirely obliterated. It remains as a depression surrounded by a slight ridge. This ridge is composed of the earth and decomposed timbers of the roof. When the house is abandoned, much of the earth covering the roof slides down to the margin of the hole, where it accumulates, while the thin layer left on the roof only partly fills the room. Under the space where the composite door, window, and chimney was, the hole is left about as deep as ever, but may be partly filled with *débris* blown in by the wind.

A good example of a prehistoric house-pit or depression, where an underground house had once been, was found at the northern end of the main village-site, and is shown in the foreground of Plate XIII (Fig. 2). It is nearly circular, its longest diameter from the inside edges measuring thirty-nine feet, while the shortest diameter is thirty-seven feet. The corresponding measurements from the outer edges of the surrounding ridge are fifty-three feet and forty-nine feet. The bank between the points where these measurements were taken is from twenty to thirty inches above the level of the ground, and the depth of the hole at the centre is approximately six feet.

Tools. — Numerous wedges made of elk-antler were obtained, which must have been very efficient for splitting timbers in the building of houses, for cutting fire-wood, and for general carpentry work.

These wedges were found in the excavations (Fig. 36) and upon the surface (Fig. 37). They are usually made from the large part of an elk-antler, near its base, and cut off diagonally across. Some wedges which may have been used for special purposes are made of curved pieces of antler. They resemble in shape the curved wedges of the canoe-builder of the coast Indians.

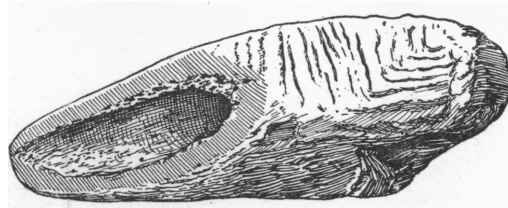


Fig. 36 (5147A). Wedge made of Antler. Found in excavating. $\frac{1}{2}$ nat. size.

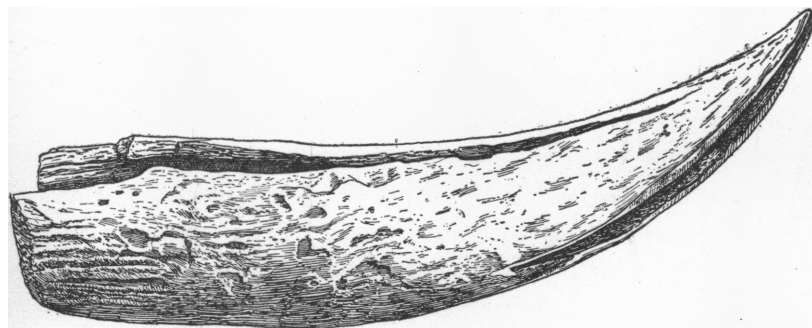


Fig. 37 (5147). Curved Wedge made of Antler. Found on surface. $\frac{1}{2}$ nat. size.

The heads of some of the wedges are bruised and slivered by being driven with a stone pestle or maul. The use of a pestle for driving wedges gives it a concave base (Fig. 27) or one with a hollow in it. Rubbing tends to form a convex base. Some of the specimens have convex bases with a hollow in the centre. It seems probable that pestles were used for a variety of purposes.

The common deeply-pitted hammer-stone was not found at this locality ; but

stone hammers or mauls were secured, that probably had been hafted in some way, and used on both ends. The granite specimen shown in Fig. 38 has a slight pit on either side, and the two ends are battered. One small granite pebble (Fig. 39) has a groove which extends nearly around it, and which, if continued, would form a spiral. There is no evidence of its use as a hammer-stone. It may have been a sinker, or it may have been covered with skin or other material and used as a club-head. In the latter case the tendency of the groove to a spiral form would allow a withe to be firmly attached.

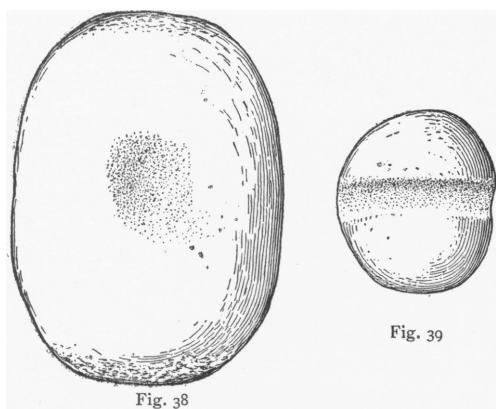


Fig. 38 ($\frac{1}{8}$ nat. size). Stone Hammer. Found on surface. $\frac{3}{4}$ nat. size.
Fig. 39 ($\frac{1}{8}$ nat. size). Grooved Stone Hammer or Club-Head. Found on surface. $\frac{3}{4}$ nat. size.

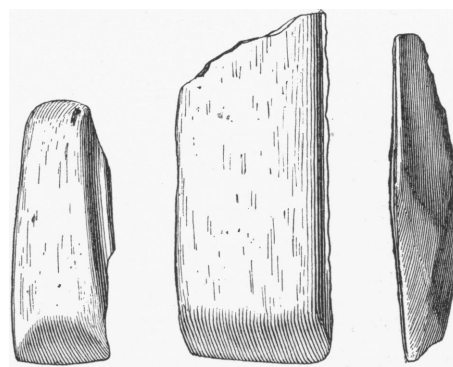


Fig. 40 ($\frac{1}{8}$ nat. size), Fig. 41 ($\frac{1}{8}$ nat. size), Fig. 42 ($\frac{1}{8}$ nat. size). Celts made of Nephrite. $\frac{1}{2}$ nat. size.
Fig. 40 ($\frac{1}{8}$ nat. size), Fig. 42 ($\frac{1}{8}$ nat. size). Found in grave.
Fig. 41 ($\frac{1}{8}$ nat. size). Found in grave, under left knee.

The coast Indians use celts mounted as adzes for finishing the boards that have been split with wedges. Until recently these celts were made of stone. Those found at Lytton are made of light-green translucent material, and vary

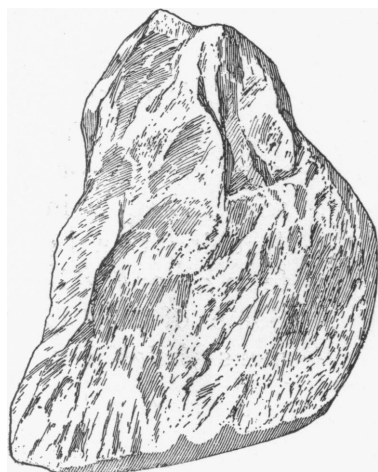


Fig. 43 ($\frac{1}{8}$ nat. size). Celt made of a Flake from a Nephrite Boulder. Found on surface. Nat. size.

in size from more than four inches in length by an inch and a half in width and a quarter of an inch in thickness, to scarcely an inch in length with other dimensions in relative proportion.¹ On some, such as those shown in Figs. 40, 41, and 42, the grooves which were made in cutting them out of the blocks of raw material still show slightly. Other specimens have been polished until no trace of these grooves remains. One celt (Fig. 43) was simply made from a flake of nephrite struck from a boulder, the wedge-shaped flake being but slightly rubbed on the edge until it became a sharp, fine-cutting implement. Save for this edge and a rubbed surface here and there, it resembled a natural flake from a boulder.

These celts were made from boulders of greenstone secured along the river-

¹ See p. 132 for discussion of the nature of the material.

bank. A series of specimens will illustrate their method of manufacture. Grooves were first ground or rubbed into the boulders. In some the grooves had been rubbed from both sides until a portion was nearly cut off, after which it had been

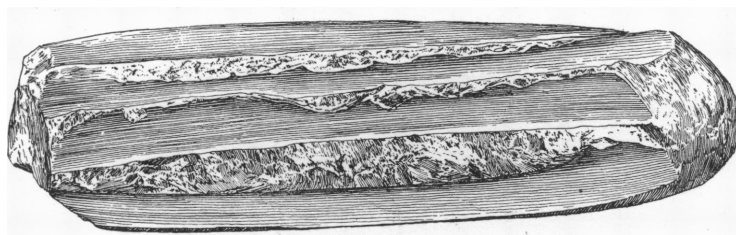


Fig. 44 ($\frac{1}{2}$ nat. size). Serpentine Boulder from which Pieces have been detached. Found on surface. $\frac{1}{2}$ nat. size.

broken away (Figs. 44, 45). Such selva pieces (Fig. 46) broken off from large boulders were found. A number of finished celts show this break along one or both edges. Fragments of siliceous sandstones with bevelled edges (Fig. 47) which fit these grooves were obtained. They are evidently the saws or grinders used for cutting the grooves. It has been suggested that boulders may have been cut by means of a string and sand, but the character of some of the grooves does not favor this theory. In many of the specimens striæ may be seen parallel to the deepest part of the trough, which show that the cutting-implement was moved in that direction. A string and sand would produce striæ of this kind, and a convex groove, *i. e.*, one higher in the middle than at the ends. The grooves in a number of specimens, such as the lower groove in Fig. 45, are, however, con-

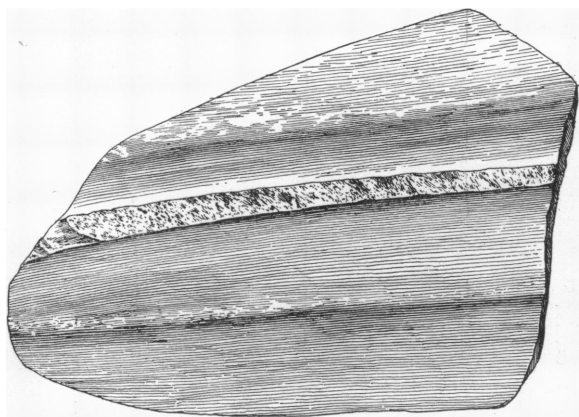


Fig. 45 ($\frac{1}{2}$ nat. size). Serpentine Boulder from which Pieces have been detached. Found on surface. $\frac{1}{2}$ nat. size.

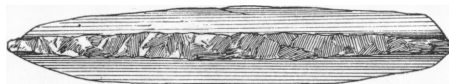


Fig. 46 ($\frac{1}{2}$ nat. size). Nephrite cut from a Boulder. Found in grave. $\frac{1}{2}$ nat. size.

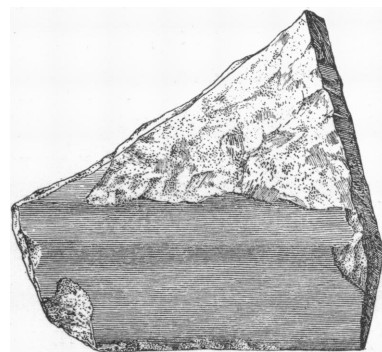


Fig. 47 ($\frac{1}{2}$ nat. size). Grinding-Stone. Found on surface. $\frac{1}{2}$ nat. size.

cave, *i. e.*, deeper in the middle than they are at the ends. A string and sand cannot produce grooves of this kind. The use of a grinding-stone or of sand on a flat piece of wood, the edge of which would take the place of the grinding-stone, or of quartz crystals as suggested by Dr. Dawson,¹ might produce both concave

¹ Transactions of the Royal Society of Canada, Section II, 1891, p. 19.

and convex grooves. Grooves of the latter kind are shown in Fig. 44, while both kinds may be noticed in the boulder shown in Fig. 45. Large quartz crystals, which are not very numerous, show little or no signs of use, such as one might expect if they had been employed for cutting grooves; besides this, they are so few in number, as compared to the cut specimens, that their use as cutting-tools seems improbable. On the other hand, the bevelled gritstones were found in numbers that suggest their frequent use as cutting-tools.

The grinding-stones, as suggested before, seem to have been fragments of large slabs, and are all of coarse siliceous sandstone. They are rough fragments, one edge of which has been rounded or bevelled, either purposely for cutting grooves by means of which to saw up blocks of stone, or accidentally as a result of rubbing. One specimen was rounded on two adjacent edges. The rounded surfaces of all the specimens are slightly striated parallel to the bevelled edge.

Whetstones, probably for sharpening celts, slate knives, etc., were made of fine-grained schist. These were of frequent occurrence, and were usually found in a group of implements in graves at the main burial-place. The specimen shown in Fig. 48 was daubed with red ochre, and found with the slate knife pictured in Fig. 34.



Fig. 49 (3385).
Knife-Blade
made from a
Beaver-Tooth.
Found on sur-
face. Nat. size.

Blades for small knives (Fig. 49), probably used in wood-carving, were made from beaver-teeth. The posterior side of the long curved tooth has been cut off, which makes the tool thinner. The natural cutting-edge of the tooth serves as an excellent carving-instrument. The base is rounded, and was probably inserted in a handle.

A knife-handle made of the rib-bone of some large animal (Fig. 50) was found in a grave with fragments of glassy basalt, one of which may have served as the blade. The end into which the blade was inserted is covered in places with gum similar to that of the pine. This was probably used in securing the blade to the handle. There are twelve notches or tally-marks along the side, nearly obliterated by wear. The chipped point of glassy basalt figured with this bone handle, although found on the surface apart from it, shows how well adapted the handle is to the common forms of stone points.

Fig. 51 shows the tip of an antler with a thin cutting-edge, and may have been used for basket-plaiting. The antler bar seen in Fig. 52 is slightly thinner at its



Fig. 48 (3387A).
Whetstone.
Found in cache
in grave. 1/2 nat.
size.

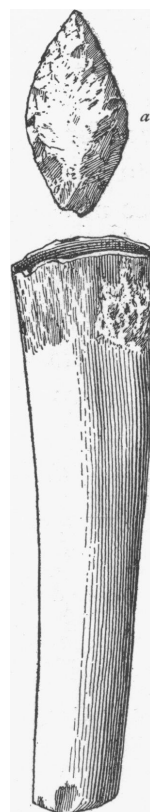


Fig. 50 (3387).
Knife-Handle made
of Bone. Found in
grave. 1/2 nat. size.

Fig. 50a (3387B).
Point for a Knife, or
Arrow-Point. Found
on surface. 1/2 nat.
size.

upper end, but it does not present any cutting-edges. It has been made from the outer shell of a large piece of antler. The next specimen (Fig. 53) is the small tip of an antler, the lower end of which is worked to a gouge shape. Its use is doubtful.

The bone chisel or adze (Fig. 54) was found with other objects by the side of one of the skeletons. The chipped objects of glassy basalt (Figs. 11, 12, and 19) may have been used for sawing or scraping, and the specimen of the same material shown in Fig. 13 could well have served for a drill.

The uses of the spatulate object made of antler (Fig. 55) and of the barbed and notched object (Fig. 56) are undetermined. The former may also have been useful in basket-plaiting. Being only about a sixteenth of an inch in thickness, it closely resembles a paper-cutter, and is well finished. The latter implement is also nicely made, and is remarkable on account of its ornamental notches.



Fig. 51



Fig. 52



Fig. 53

Objects made of Antler. $\frac{1}{2}$ nat. size.

Fig. 51 (3881), Fig. 53 (3884). Found in grave.
Fig. 52 (3880). Found on surface.

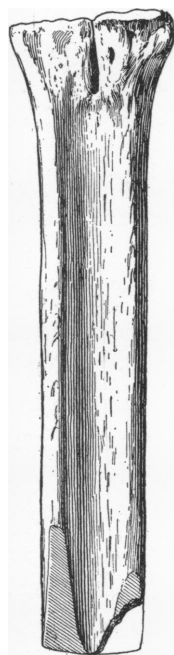


Fig. 54 (3884). Adze or Chisel made of the Anterior Metapodial of an Elk (?). Found in grave. $\frac{1}{2}$ nat. size.



Fig. 55

Fig. 55 (3882). Spatulate Object made of Antler. Found in grave. $\frac{1}{2}$ nat. size.



Fig. 56

Fig. 56 (3883). Object made of Antler. Found in grave. $\frac{1}{2}$ nat. size.

Pairs of coarse siliceous sandstone implements, sometimes daubed with red ochre (Fig. 57), were frequently found in the graves, and scattered among the traces of hearths and village-sites. In general these resemble the arrow-shaft smoothers found in other parts of the continent. They have the form of a half-cylinder with a groove extending the length of the flat side. When a pair of these are placed with their grooved faces together, they form a cylinder about six

inches in length, an inch and a half in diameter, and with a central bore a quarter of an inch in diameter (Fig. 58).

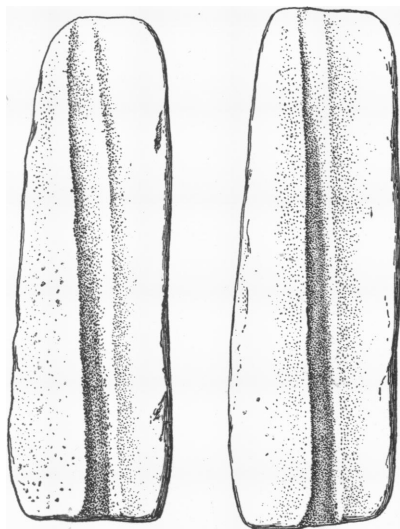


Fig. 57 ($\frac{1}{2}$ nat. size). Pair of Grooved Stones. Found in grave. $\frac{1}{2}$ nat. size.

If the implements were tightly grasped in the right hand, the thumb and fingers would cause the top of the upper piece to pivot slightly to the left. Such has evidently been the case, as the grooves in nearly all the specimens trend slightly from right to left, and the lower right corner corresponds with the upper left in being worn away more than the opposite corners. Held in such a position, and with the grooves fitted to an arrow-shaft, they would serve well, not only to smooth the shaft in the same way as when sand-paper is used, but also to straighten it.

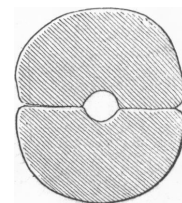


Fig. 58 ($\frac{1}{2}$ nat. size). Cross-Section of Grooved Stones in Fig. 57.

The perforated slate disk shown in Fig. 59 was proba-

bly a spindle-whorl. It suggests that the wool of the mountain-goat was spun and woven into blankets, as is done by the coast Indians, who formerly used dog-hair and feathers for the warp in weaving such blankets; or it may have been used in the manufacture of fabrics from the bark of the sagebrush, which has been extensively employed in weaving by the Indians of the Thompson River valley, and by the prehistoric people of Spences Bridge and Kamloops, which are within the same area. Small pieces of woven fabric, probably made of sagebrush-bark, have also been found at Lytton. This slate disk was found in a grave at Lytton, and presented to the Provincial Museum at Victoria, B. C., by Mr. F. M. Stevenson. It is about a quarter of an inch in thickness, and the perforation was drilled from both sides, tapering towards the centre, yet not so much as to prevent the whorl from being held to a spindle.

Some fragments of skin, which were evidently portions of blankets or garments, were preserved by the dry climate and the action of copper salts. A considerable series of specimens was secured, which suggest the preparation of skins and their manufacture into garments. Scrapers and awls made of stone and bone, and bone needles, belong to this series.

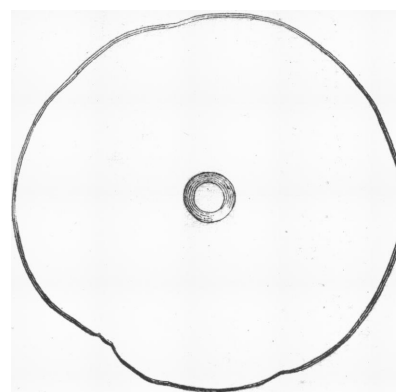


Fig. 59 (455 [123]). Perforated Disk. Found in grave at Lytton. $\frac{1}{2}$ nat. size. (From a drawing, by Miss E. H. Woods, of a specimen in the Provincial Museum, Victoria, B. C.)

Skin-scrapers were made of quartzite pebbles (Fig. 60), which occur in great

numbers in the gravel on the bank of the river and on the mountain-sides. Often

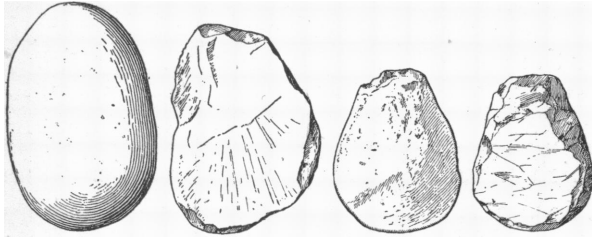


Fig. 60

Fig. 61

Fig. 62

Fig. 63

Stages of Manufacture of Skin-Scraper. Found on surface. $\frac{1}{2}$ nat. size.

Fig. 60 ($\frac{1}{2}$ nat. size). Quartzite Pebble.

Fig. 61 ($\frac{1}{2}$ nat. size), Fig. 62 ($\frac{1}{2}$ nat. size). Flakes from Quartzite Pebble.

Fig. 63 ($\frac{1}{2}$ nat. size). Skin-Scraper made from Quartzite Pebble.

almond-shaped flakes (Fig. 61) were broken from these pebbles. These pieces are about one-third the thickness of the original pebble. Sometimes such pieces (Fig. 62) had been used for scraping without additional flaking, as was testified by the worn and polished condition of the broader end. The finished skin-scraper (Fig. 63) was simply one of these almond-shaped

flakes which had been perfected by being chipped all round the edge.

Many scrapers of this sort, and some natural fragments of convenient form from neighboring outcrops, have been seen in use among the women of this region for softening skins. They were inserted in the split end of a wooden handle about three feet in length, and held there by winding with a thong that portion of the wood that held the stone. After the skin has been fleshed and freed from hair, it is stretched upon a framework of poles, and prevented from becoming hard and stiff by being scraped and poked with such a scraper until it is thoroughly dry. The specimen shown in Fig. 64 is much worn by such use.



Fig. 64 ($\frac{1}{2}$ nat. size). Skin-Scraper, hafted in a Wooden Handle. Shuswap Indians, Kamloops, B. C. $\frac{1}{2}$ nat. size.

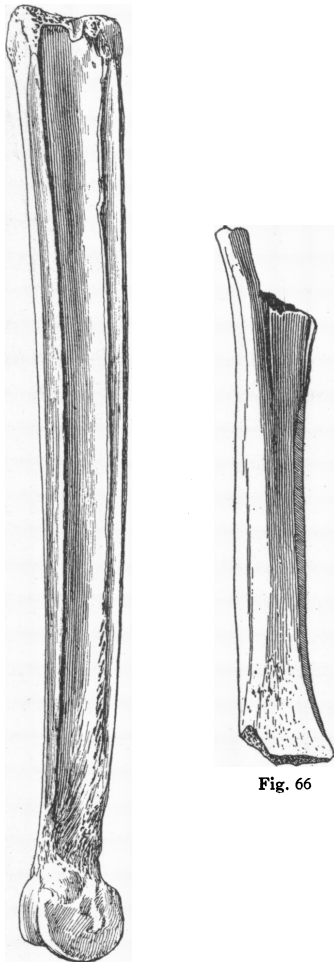


Fig. 66

Fig. 65

Scrapers. $\frac{1}{2}$ nat. size.

Fig. 65 ($\frac{1}{2}$ nat. size). Made of Posterior Metapodial of a Deer. Found on surface.

Fig. 66 ($\frac{1}{2}$ nat. size). Made of a Scapula. Found in grave.

Scrapers (Figs. 65, 66) were also made of bone, but these are of another shape, and were undoubtedly used in a way quite unlike that in which the stone scrapers were employed. The specimen shown in Fig. 65 is made of the posterior metapodial of a deer. Several of these were found finished, and some in process of manufacture. In an ancient grave at Spences Bridge, twenty-two miles above Lytton on the Thompson River, a scraper of this kind was found with traces of wrapping at the ends.

The Indians of to-day have a scraper of a similar shape, made from a horse's rib

or a barrel-hoop by winding the ends with rags to form handles. This they use like a draw-knife to beam deer-skins.

Awls and needles were required for the manufacture of garments. A pointed object made of steatite (Fig. 67), about an inch and a half long and an eighth of an inch in diameter, smoothly polished, was found, as were also several natural pieces of chalcedony (Figs. 68, 70) which may have been used for awls. The chipped specimen of glassy basalt (Fig. 69) and the chipped opalescent chalcedony (Fig. 71) more closely resemble what are usually called 'drills' or 'perforators,'

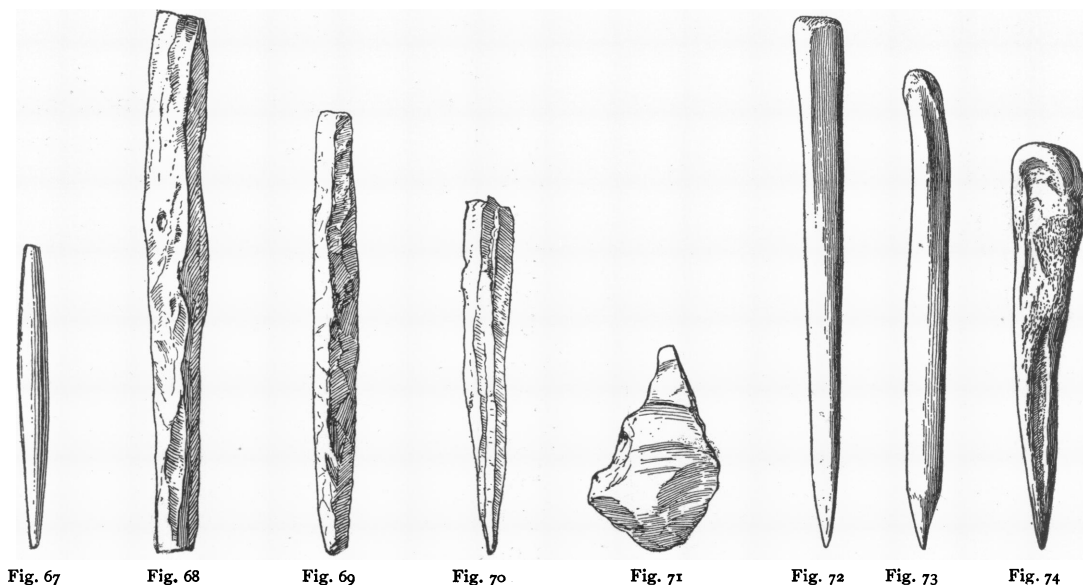


Fig. 67

Fig. 68

Fig. 69

Fig. 70

Fig. 71

Fig. 72

Fig. 73

Fig. 74

Fig. 67 (3115). Pointed Object of Steatite. Found in excavating. Nat. size.
 Fig. 68 (3117). Natural Piece of Chalcedony. Found in excavating. Nat. size.
 Fig. 69 (3118). Chipped Specimen of Glassy Basalt. Found in excavating. Nat. size.
 Fig. 70 (3117a). Natural Piece of Opalescent Chalcedony. Found in excavating. Nat. size.
 Fig. 71 (3117). Chipped Specimen of Opalescent Chalcedony. Found on surface. $\frac{2}{3}$ nat. size.
 Fig. 72 (3117), Fig. 73 (3118). Bone Awls. Found on surface. $\frac{1}{2}$ nat. size.
 Fig. 74 (3118). Bone Awl. Found in grave. $\frac{1}{2}$ nat. size.

and these may have served in other industries than the manufacture of garments. The bone awls (Figs. 72-74) and the decorated specimen (Fig. 108) are well adapted for use in sewing skins, or, like the bone point shown in Fig. 75, and the antler objects in Figs. 51 and 55, may have been used for plaiting baskets. The specimen pictured in Fig. 72 bears traces of red ochre, although it is much bleached from lying exposed on the surface. Fig. 74 shows an awl made of one half of the distal end of the metapodial of a deer, which is so frequently employed throughout America for awls and other implements.

Needles made of bone (Figs. 76-79), both fine and coarse, were found in the graves, and scattered through the ground. Each of them was provided with an elliptical eye, with its major axis lying in the axis of the needle. The specimen shown in Fig. 76 is ornamented with a pattern consisting of a few incised lines.

War. — Many of the implements that were used for hunting were undoubtedly also used in warfare. The chipped points and knives previously described cer-

tainly served either purpose. A number of special war implements have been found. A large dagger or knife (Fig. 80) made of antler, and much weathered by long exposure, was found on the surface of the main burial-site; and from the excavations a much disintegrated war-club (Fig. 81) of particular interest was secured.



Fig. 75 (31187).
Bone Point.
Found on sur-
face. Nat. size.

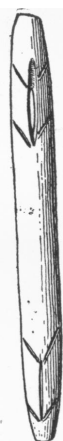


Fig. 76



Fig. 77



Fig. 78



Fig. 79

Bone Needles. $\frac{1}{2}$ nat. size.

Fig. 76 (30839), Fig. 77 (30817), Fig. 79 (30817). Found in grave.

Fig. 78 (31187). Found in excavating.



Fig. 80

Fig. 80 (31137). Dagger made of Antler. Found on surface. $\frac{1}{2}$ nat. size.



Fig. 81

Fig. 81 (31132). War-Club made of Antler. Found in excavating. $\frac{1}{2}$ nat. size.

It is made of an elk-antler. The prong near the base is bevelled in the shape of a wedge, and the longer branch forms the handle. The grooved stone shown in Fig. 39 may have been used as the head of a club, similar to those used by the present Indians of southern British Columbia.

A copper war-club was obtained by Mr. James Teit from Indians who dug it

out of a prehistoric grave at Spuzzum, B. C. This place is at the mouth of the cañon of the Fraser, forty-two miles south from Lytton. The practical difficulties of the journey were great before contact with the whites; but the geographical nearness, and the fact that the present Indians of Spuzzum are of the same tribe as those of Lytton, induce me to describe this specimen with those from Lytton. Its edge is bevelled, and in some places is knife-like. The grip and base are flanged by lateral pounding, and a design is engraved on each side, as is shown in Fig. 82.

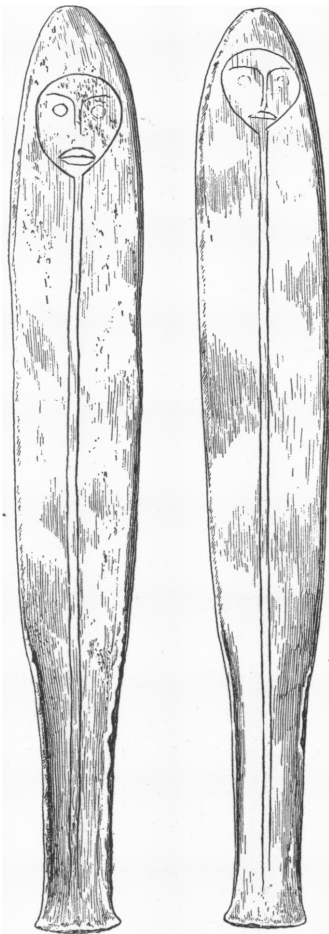


Fig. 82 ($\frac{1}{2}$ nat. size). Copper War-Club. Found in grave, Spuzzum, B. C. Length, 18½ in.; width, 2½ in.; thickness, ½ in.



Fig. 83 ($\frac{1}{2}$ nat. size). Fragment of a Comb made of Antler. Found on surface. ½ nat. size.

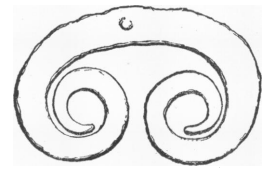


Fig. 84 ($\frac{1}{2}$ nat. size). Copper Ornament. Found in grave. ½ nat. size.

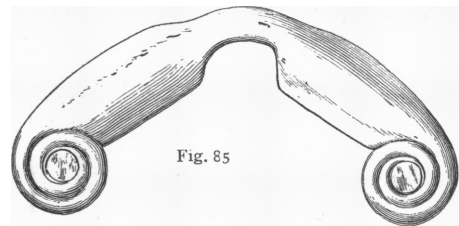


Fig. 85

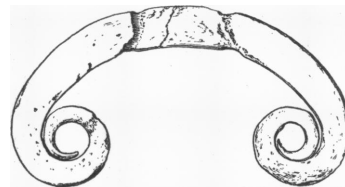


Fig. 86

Hair Ornaments. ½ nat. size.

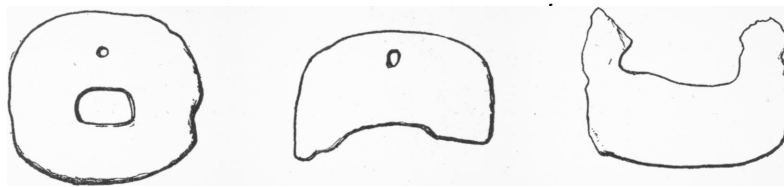
Fig. 85 ($\frac{1}{2}$ nat. size). Made of iron, inlaid with haliotis shell. Chilcat, Alaska.

Fig. 86 ($\frac{1}{2}$ nat. size). Made of copper. Excavated from a village-site near Fort Wrangel, Alaska.

Dress and Ornament.—Skins and garments woven of bark of the sagebrush and of mountain-goat wool probably furnished the material for clothing for the prehistoric people of Lytton. Fragments of deer-skin and fabric woven from vegetable fibre, probably sagebrush, and a considerable number and variety of personal ornaments, were found. Red, blue, yellow, and white paint, and probably charcoal mixed with grease, were used for painting the body. Combs were in use, and body and clothing were decorated with ornaments and pendants of copper, stone, shell, bone, teeth, and hair. A fragment of a comb made of antler (Fig. 83) came from the surface of the main burial-place. It is much bleached and weathered.

A pair of copper ornaments, one of which is seen in Fig. 84, was found in a grave a foot and a half deep at the main burial-site. The body was so much decayed that it was impossible to see what position they occupied in relation to it. There are some pieces of hair preserved and embedded in the copper salts which incrust them. These ornaments resemble in shape similar objects which were used in recent times as hair ornaments for girls by certain tribes of the coast. Two of these (Figs. 85, 86) are figured for comparison. The first is made of iron inlaid with haliotis shell, and is from Chilcat, Alaska. The second, like the Lytton specimen, is of copper, and was excavated from a village-site near Fort Wrangel, Alaska. A copper ornament of the same shape as the one shown in Fig. 86 has been found in a shell-heap at Point Thomas, near Fort Rupert, Vancouver Island, B. C.

Other copper ornaments are shown in Figs. 87-89. These were found while excavating in the main burial-place, but the skeleton with which they were buried

Fig. 87 ($\frac{31}{16}$ A)Fig. 88 ($\frac{31}{16}$ B)Fig. 89 ($\frac{31}{16}$ C)

Copper Ornaments. Found in excavating. Nat. size.

was too much decayed to distinguish the part of the body upon which they were worn. They are very thin, much corroded, and may have served as bangles or pendants.

The pear-shaped object of stone shown in Fig. 90 is slightly rubbed on the base. It has a perforation through the smaller end, drilled in the usual way, from each side. It was collected by Mrs. Bailey in 1890, and is now in the Provincial Museum, Victoria, B. C.

A number of pendants or bangles made of sheet-mica, such as the one in Fig. 91, were found in one of the graves which contained a great variety of objects.

Many irregular pieces of the shell of *Pecten caurinus* (Figs. 92, 93), with edges rubbed smooth and with one or two perforations, were found in the excavations at the sixth site, and fragments of the same shell were found scattered on the surface of the fifth site. The perforated specimens seem too small to have been used as rattles, and may have been pendants, ear-ornaments, or bangles. Some of them were daubed with red ochre.

Several pieces of abalone shell with squared edges were found in a grave at the main site. One of these (Fig. 94) was perforated. Probably it was used as a pendant. Such shell ornaments are now highly prized by the coast Indians on account of the iridescence of the shell.

Two triangular bone pendants, one of which is shown in Fig. 95, were found

in a grave at the main site. The specimen figured is slightly larger than the other. It is well made, very thin, with rather sharp edges, and an elliptical perforation at the upper end.

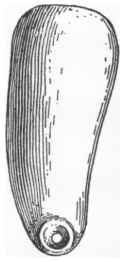


Fig. 90 (938 [322]). Object made of Stone. Lytton. $\frac{1}{2}$ nat. size. (From a drawing, by Miss E. H. Woods, of a specimen in the Provincial Museum, Victoria, B. C.).

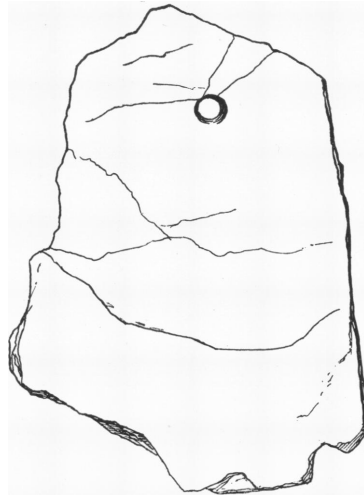


Fig. 91 ($\frac{3188}{8}$). Pendant or Bangle made of Mica. Found in grave. Nat. size.

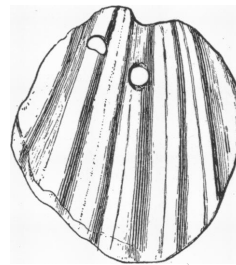


Fig. 92 ($\frac{3188}{4}A$)

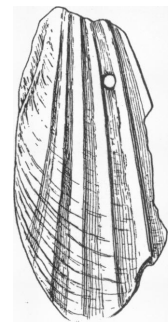


Fig. 93 ($\frac{3188}{8}B$)

Perforated Objects made of Shell. Found in excavating at 6th site. $\frac{1}{2}$ nat. size.

Pendants like that seen in Fig. 96, made of the canine teeth of the elk, were found in large numbers in the graves. Sometimes they were lying in the vicinity of the neck-bones of the skeleton. The perforation drilled from side to side through the base of the root is usually worn smooth, and many of these objects

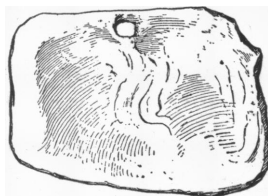


Fig. 94 ($\frac{3188}{8}A$). Perforated Object made of Abalone Shell. Found in grave. $\frac{1}{2}$ nat. size.

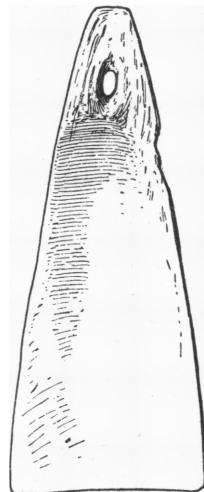


Fig. 95 ($\frac{3188}{8}$). Pendant made of Bone. Found in grave. $\frac{1}{2}$ nat. size.

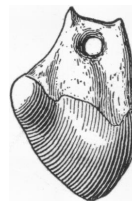


Fig. 96



Fig. 97



Fig. 98

Pendants. Found in excavating. Nat. size.
Fig. 96 ($\frac{3188}{8}A$), Fig. 98 ($\frac{3188}{8}$). Made of elk-tooth.
Fig. 97 ($\frac{3188}{2}$). Made of a canine tooth.

are stained by copper salts. This again proves that ornaments made of copper were in use. Mr. James Teit has learned from the Indians that elk-teeth were often sewed on the garments, and also fastened to the prows and gunwales of canoes with string or gum. One pendant (Fig. 97) was made of the canine tooth

of a wolf, perforated through the root for suspension, and ornamented with three grooves running around it. Another (Fig. 98), made of the incisor tooth of an elk, was provided with a groove instead of a perforation for suspension.

Shell beads of various kinds were used for necklaces, fringes, and the like. There are perforated disks or short cylindrical beads which average an eighth of an inch in diameter, a thirty-second of an inch in thickness, with a perforation about a thirty-second of an inch in diameter, drilled with a bevel from each side. Specimens of these shell beads were so numerous on certain parts of the surface of the main village-site, that, after picking up a great many of them, their number seemed undiminished. Dentalium shells, and sections of these shells cut about an eighth of an inch in length, were found, as well as little olivella shells, the ends of all of the latter being broken off, probably to make a hole for stringing. Some of these olivella shells had holes in the body near the lip, which, however, may have been merely accidental. In one of the graves some short cylindrical beads made of sections of dentalium shells were found still upon a portion of the string, which had been preserved by the dryness of the sand. This string, as identified by Mr. Willard N. Clute of the New York Botanical Gardens, is made of the bark of the red cedar (*Thuja gigantea*). This material is more commonly used on the coast, and may have been imported with the shell beads upon it.

Several tassels made of dentalium shell and hair (Fig. 99) were found in the same grave with a slate fish-knife and a whetstone. These tassels are much stained by copper salts. A doubled lock of hair, held in the middle by a loop of string the strands of which are twisted to the right, was pulled up into the shell.



Fig. 99 ($\frac{3}{16}$ in.). Tassel made of Dentalium Shell and Hair. Found in grave. Nat. size.

Games, Amusements, Narcotics.—Sets of dice (Fig. 100) were often found with other objects at the sides of the skeletons. Although beaver-teeth, some of which were covered with red

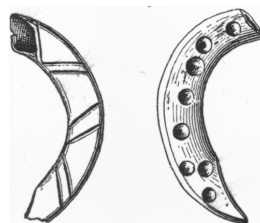


Fig. 100 ($\frac{3}{16}$ in. A, $\frac{3}{16}$ in. B). Dice made of Woodchuck-Teeth. Found in grave. Nat. size.

ochre, were found in the same places, and dice made of beaver-teeth were secured from prehistoric graves at Kamloops, B. C., yet all of the dice found here were made from the teeth of the woodchuck. These are so much like the dice made of beaver-teeth which the modern Indians of British Columbia use, that our knowledge of that game enables us to explain these specimens. The counting varies slightly at different places, but the game is practically the same. Dr. Franz Boas¹ describes this game, as played by the Lku'ñgen of south-eastern Vancouver Island, as follows:—

“A game at dice is played with four beaver-teeth, two being marked on one of their flat sides with two rows of small circles. They are called ‘women.’ . . . The

¹ Sixth Report on ‘The Northwestern Tribes of Canada’ to the British Association for the Advancement of Science.

two others are marked on one of the flat sides with cross-lines. They are called 'men.' . . . One of them is tied with a small string in the middle. . . . The game is played by two persons. According to the value of the stakes, thirty or forty sticks are placed between the players. One begins to throw. When all the marked faces are either up or down he wins

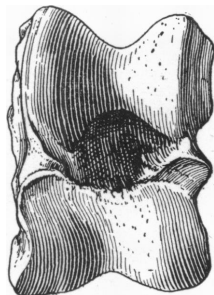


Fig. 101 (3187A). Astragalus Bone. Found in excavating. Nat. size.

two sticks. If the faces of the two 'men' are up, of the two 'women' down, or *vice versa*, he wins one stick. When the face of the [marked tooth] is up, all others down, or *vice versa*, he wins four sticks. Whoever wins a stick goes on playing. When one of the players has obtained all the sticks he has won the stake."

The astragalus bone of the deer (Fig. 101) is frequently found, and possibly it was used by these people, as it was farther east, for dice in gambling.

The tube with a hole in the side, made of a bird bone, and shown in Fig. 102, may have been used as a whistle or as a drinking-tube. If for the latter purpose, it may have been attached to the owner by a string fastened into this hole. The smaller end is worn smooth, while the larger end shows how the bone was partly cut through and then broken off. A number of small tubes made of bird bones were also found. They vary from one to five inches in length, and some of them bear one or more rows of notches or tally-marks. Some of the ends have been partly cut through and then broken off, and a few are worn smooth, the bone being polished for a little distance along its surface. Sticks of a similar shape are used in gambling among the coast Indians.

Fragments of the shells of *Pecten caurinus* may be parts of rattles similar to those used in the dances of the coast Indians of to-day, and it is possible that the perforated specimens shown in Figs. 92 and 93 were also strung for use as rattles.

The practice of smoking is indicated

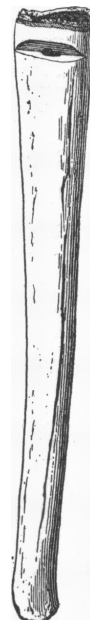


Fig. 102 (3188). Bone Tube. Found on surface. 1/2 nat. size.

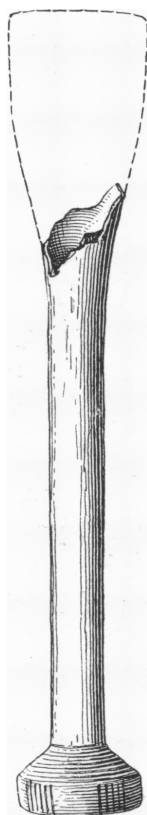


Fig. 103 (3189). Fragment of a Steatite Pipe. Found in grave. 1/2 nat. size.



Fig. 104 (3090)



Fig. 105 (394A)

Pipes made of Steatite or nearly Allied Material. Lytton, B. C. 1/2 nat. size. (Drawn from a photograph of specimens in the Museum of the Geol. Surv. of Canada.)

by the presence of stone pipes (Figs. 103-105, 111-113). The present Indians of this region mix bearberry (*Arctostaphylos uva-ursi* Spreng.) with their tobacco to render it less strong for smoking. According to information obtained by Mr. James Teit, before the introduction of manufactured tobacco, the wild, narrow-leaved tobacco (*Nicotiana attenuata* Torr.) of the region was used. Possibly this plant mixed with bearberry was smoked by the prehistoric people of Lytton. The occurrence of charred bearberries in the old hearths strengthens this opinion.

The pipes were made from steatite. Blocks of the raw material broken from the rock, and pieces of the same which had been cut and rubbed, were found on the surface. Finished pipes, highly polished, and ornamented with incised lines, have been found *in situ* in the old graves. The bowl of this style of pipe is of the shape of a wine-glass, and the stem is simply an extension of the bowl, the axes of both being in a straight line. The specimen shown in Fig. 103 was found in a grave at the main site. It is nicely cut from a greenish steatite, and is well polished. The mouthpiece is marked with parallel lines such as would be made with a notched stone or bone. The hole is slightly funnel-shaped for about a quarter of an inch from the mouth, but is straight the rest of the way, showing a high degree of skill in drilling. The pipe shown in Fig. 104 was collected by Mr. Charles Hill-Tout, and the one in Fig. 105 is of the collection made in 1877 by Dr. George M. Dawson. They are both from graves at Lytton, and are made from steatite or nearly allied material. The drawings of the last two are made from photographs furnished through the courtesy of Dr. Dawson.

The river pebble of schistose rock with an incised cross, shown in Fig. 106, was found on the surface of the sixth site. It may have been used in a game of some sort, but I know of no existing game in which such stones are employed. The engraving is not very neatly done, there being several marks where the cutting-instrument has slipped, or where notches in it have caused side scratches. The cross was not necessarily borrowed from other people, and is no indication that the specimen was made since contact with the whites.

Art. — The art of these people is illustrated by paintings, engravings, and carvings, and also by the ornaments used for personal adornment. A small boulder was found on which there was a circle painted in red. Many pieces of bone, antler, etc., are also stained with red ochre, which may or may not have been intentionally applied.

The implement made of antler (Fig. 107) is decorated with a pattern of engraved cross-lines. It was found in a grave at the main burial-site, and is stained with red ochre. It is slightly wedge-shaped at its smaller end, worn by use, and seems to be best explained as an implement used for plaiting baskets. The bone awl shown in Fig. 108 was found upon the surface, much bleached. Its cross-section shows four sides. These are ornamented by incised lines forming

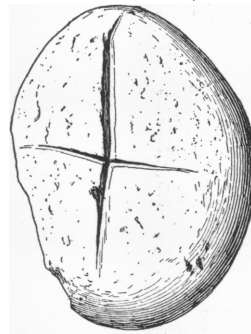


Fig. 106 ($\frac{3}{4}$ nat. size). Pebble with Incised Cross. Found on surface, 6th site. $\frac{3}{4}$ nat. size.

X-shaped figures on one side, sets of three parallel lines upon two sides, while the last side, next to the X-shaped figures, is plain. The incised lines on some of the bone tubes previously mentioned may have been intended as decorations. The handle of the digging-stick made of antler (Fig. 21) bears an incised design at each end. The similarity of these designs to those used by the present Indians induced me to request Mr. James Teit to submit drawings of these specimens to several old Indians. Their interpretations are as follows : —

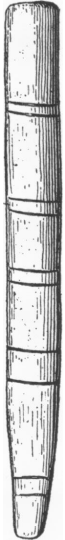


Fig. 107 (38887).
Implement
made of Antler.
Found in grave.
 $\frac{1}{2}$ nat. size.

The ladder-like design on Fig. 21 is a snake or worm pattern, which is intended to represent the striped skin of those animals. When used as patterns in ornamentation, these were generally drawn or carved without showing the head or tail of the animal. The two end designs on the large half of the handle represent a hairy insect. The long line with numerous short lines at right angles to it depicts a snake or a worm, which was probably the manitou of the woman who owned the handle, as it was customary for women having such



Fig. 108 (31888).
Bone Awl decorated
with Incised Lines.
Found on surface.
 $\frac{1}{2}$ nat. size.

guardian spirits to carve representations of them on their root-diggers. Snakes, wood-worms, and various insects were among the manitous most commonly possessed by women in this region. The root-digger and the tump-line were themselves the manitous of some women. The lines which cross each other probably represent cross-trails. The old Indians were doubtful about the other figures consisting of groups of parallel lines.

The Indians, when asked about the probable use of the thin blade of antler (Figs. 109 and 110), thought it might have been a sap-scraper, part of a dog's halter, or a head-scratcher. The circular design on it represents the butterfly or the eye. The ladder-shaped marks again represent the snake or worm. The short lines with one very short mark

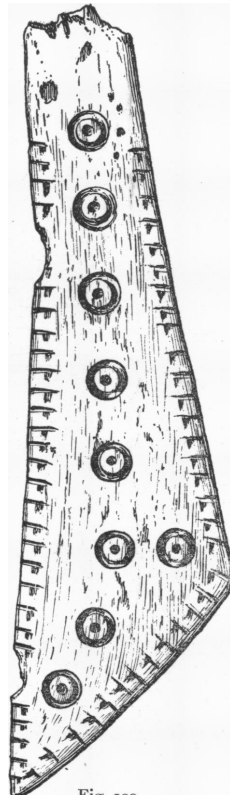


Fig. 109

Fig. 109 (38877). Implement made of Antler. Found in grave. Nat. size.

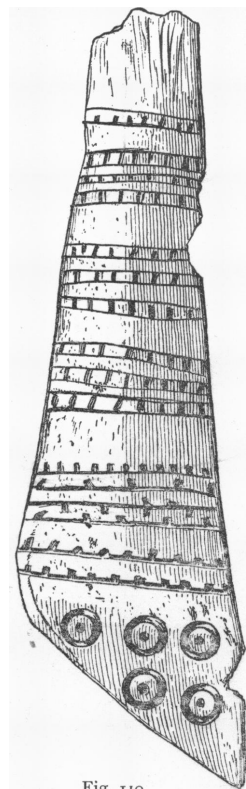


Fig. 110

Fig. 110. Reverse of Fig. 109.

extending from the middle of each (Fig. 109) may be a sign of the wood-worm, as may also the long lines with marks at right angles to them, but the latter design is more doubtful.

The pipe shown in Fig. 111 is made of steatite or nearly allied material, and is in the collection from the graves at Lytton, made in 1877 by Dr. Dawson.

Its design (Figs. 111 and 112) probably represents the beings that appeared to the owner in a dream. It was customary for men to carve on their pipes, and chiefly on sacred pipes, representations of the beings appearing in their dreams, especially in their first important dream in which they received their manitou. Owing to the secrecy of treatment of sacred objects, it is difficult to obtain specific interpretations of such designs, for these secrets would be kept by the individual even from his friends, and with his death the knowledge of the significance of the design would pass away.



Fig. 111 (394).
Pipe made of Steatite or nearly Allied Material. Found in grave, Lytton, B. C. $\frac{3}{4}$ nat. size. (From a photograph of a specimen in the Museum of Geol. Surv., Canada.)

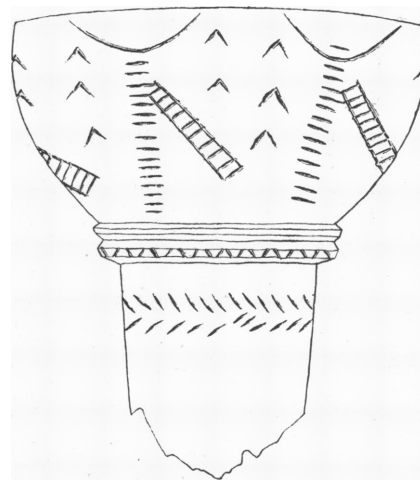


Fig. 112. Design on Pipe shown in Fig. 111. (Drawn by Mr. L. M. Lambe.)

The row of short parallel lines on this pipe may represent either a wood-worm or a rattlesnake's tail. The ladder designs are again supposed to represent snakes or worms. The lines on the stem of the pipe may depict wood-worm borings,

while a large curve close to the rim may represent the earth, a mountain, or the foot of a mountain. The inverted V-shaped figures on the bowl probably represent a bat, or they may be the flying-geese design.

Among the present Indians the following conventional designs are frequently used. A long line with short strokes arranged at regular intervals perpendicular to it usually represents hair or something similar growing from a surface, as trees from the earth. Zigzag lines represent snake-tracks; when they run down, they may mean lightning. Long straight lines represent trails, creeks, the earth, etc. The grouping of the patterns on such objects determines the meaning to a certain extent. The similarity of the art designs of the prehistoric people to those of the present natives is the strongest argument in favor of the theory that the culture of this area has not materially changed since the times when the prehistoric burial-ground of Lytton was in use and the prehistoric sites were inhabited.

Pipes made of steatite, besides being engraved, were sometimes carved. On some there is a ring around the tube where the bowl joins the stem; on others, as on the one shown in Fig. 103, there is a mouthpiece with incised ornamentation. The bowl of a pipe, a fragment only of which was found (Fig. 113), was in the form of the head of an animal with its mouth wide open. The material is steatite.

A very beautiful animal form carved in antler (Fig. 114) has a hole drilled through it, tapering from below upward; and another hole from the posterior end of the carving runs forward about a quarter of an inch. The legs stand out in relief,

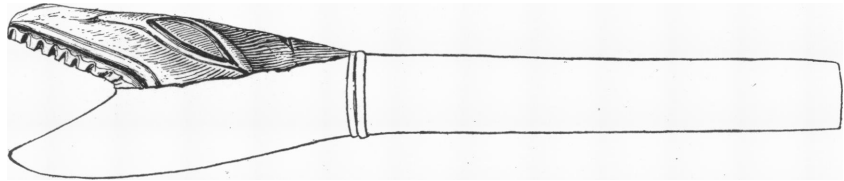


Fig. 113 (3117). Fragment of a Steatite Pipe. Found on surface, 6th site. $\frac{2}{3}$ nat. size.

while the stripes on the sides are incised. The piece has been broken or decayed in such a way that it is impossible to tell how much, if any, is lacking. A head of the same style of carving, in the same material (Fig. 115), was found. These carvings are so much alike, that one might be taken for a fragment of the other. These animal carvings are entirely different from the engraved designs, and of a high order of art, which resembles that of both the old and recent coast culture perhaps more than anything else found near Lytton.

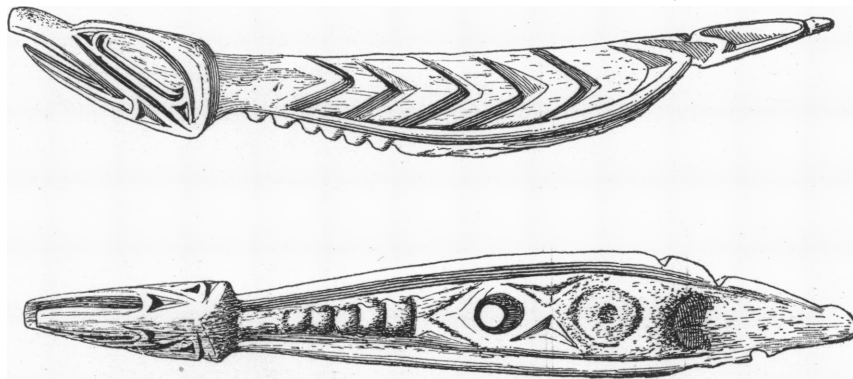


Fig. 114 (3030). Animal Form carved in Antler. Found in grave. Nat. size.

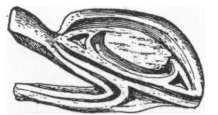


Fig. 115 (3038). Animal Head carved in Antler. Found in grave with specimen shown in Fig. 114. $\frac{2}{3}$ nat. size.

Method of Burial.—Dr. Dawson, in his notes on the Shuswap, refers to bodies found buried sitting upright, and to others lying upon the side. In still other cases he found a few bones placed in such a manner as to suggest that they were buried after the decomposition of the soft parts. Dawson¹ saw the Indians in Nicola valley rebury a body that had been dead for about a year. He found the heads of many bodies covered with red ochre, which still adhered to the skull when it was taken up. He considers that the objects buried with the dead were to represent their property rather than to be of any future use to them. For instance, flakes of glassy basalt and crooked arrow-points would represent property, though in themselves of little value. Quartz crystals, calcite, mica, and stone objects

¹ Transactions of the Royal Society of Canada, Section II, 1891, p. 13.

resembling slate-pencils, were found. He saw no iron, and believes that some of the graves at least antedate the coming of the whites to the west coast of America. The bones of small animals and bear-teeth indicate that some were hunters, and the stone adzes suggest canoe manufacture. At Lillooet, about forty miles to the north, Dr. Dawson discovered beads or pendants of galena, and many flat bone beads such as were frequently found by us at Kamloops, but which we did not see at Lytton. He found bodies at Lillooet wrapped in bark.

We did not find any grave in which the body was in a sitting posture. The description of a few graves will serve as examples of the types of graves found by us. In one of them the head was to the east, and the pelvis to the west. The feet were drawn up to the pelvis, so that the knees were in front of the chest. The head rested on the right side. The arms were flexed parallel to the body, with the hands to the face. The whole body rested horizontally. The depth in the shifting sand was a foot and a half, but originally it may have been a few inches or from ten to fifteen feet, according to the changes in the superimposed sand caused by the wind. There was a knife made of beaver-tooth at one knee; and many implements of antler and a beaver-tooth were in such a position as to suggest that they had been placed in a pouch. This bundle of objects extended in the direction from knee to face.¹

In another burial the skeleton lay with the head to the north. The body and head were covered with birch-bark. Red paint was found at the shins; and white and yellow paint, six inches east of the pelvis, or one foot east of the heels. The heels were towards the south, the face towards the west. The body rested in a horizontal position on its right side. The hands were over the face and forehead. Near the chin were dentalia, copper covering a wooden cylinder, as well as pieces of loose copper, and perforated elk-teeth stained by the copper. A nephrite celt was secured from below the lower end of the left femur, with the sharp edge towards the east. Charred berries were found above the shoulder. Six inches east of the head were an arrow-point, roughly chipped points, chips, a little nephrite celt, red paint, bone needles and other implements, a knife-point made of a beaver-tooth, and animal teeth.² Five inches east of the middle of the back a long celt was found.

The skeleton of a young adult lay with head to the north. The body had been flexed as usual. The face was to the east. Little black arrow-points³ were found throughout the grave. Some beaver-teeth and red paint were found between the middle of the tibia and the femur of the right leg. The left leg was not flexed quite as close as the right.

A group of antler implements and chips of black stone, probably the contents of a pouch, were located a few feet east of this grave, and four inches directly west of another skeleton of an older individual, which faced west, with the head to the south. The latter skeleton was disarranged, either by the wind or because

¹ Two of the antler objects are represented in Figs. 51 and 53.

² Some of these objects are shown in Figs. 41, 42, 79, 107.

³ One of them is seen in Fig. 6.

it had been reburied. With it were found chipped points of stone and pieces of the same material, a pair of grooved arrow-shaft smoothers, three whetstones, several finely carved pieces of antler, bone awls and needles, a bone scraper and pendants, dice made of woodchuck-teeth, white paint, pendants of mica, and bits of birch-bark.¹

At a depth of a foot and a half there were traces of human bones that were so much decayed that the skull resembled a layer of sawdust. The head lay to the north, and the body was doubled up in the usual manner previously described. In the grave were a number of objects, including a point of argillite, celts, chips of stone, whetstones, birch-bark, beads of dentalium, red paint, and a piece of wood covered with copper (Fig. 116).² A second burial of this kind contained, besides traces of the skeleton, a pestle, slate fish-knife, numerous chips of stone, a pair of copper ornaments, a pendant made of abalone shell, tassels of dentalium shell and hair,³ and red and yellow paint. These were in a position suggesting that they were originally deposited in a pouch.



Fig. 116 (2187).
Roll of Copper
around a Piece
of Wood. Found
in grave, 1½ feet
deep. Nat. size.

Over a few bones, one being the femur of a puma, were found pieces of birch-bark, rolls of birch-bark, a shell spoon partly filled with gum, red and blue paint, bone awls and needles, a harpoon-point of antler, a bone knife-handle, a bone chisel, bone tubes, beaver-teeth, a fantastically chipped implement of glassy basalt, two whetstones, fragments of boulders from which pieces had been detached, a celt made of similar material, a piece of a pipe made of steatite,⁴ and seeds of *Lythospermum*. This plant is still abundant in the neighborhood. It seems that while in seed it had been placed over the body, as the shell-like seeds are mixed with a very black mass, probably the decayed leaves and branches of the plant. Seeds of this kind were found both at Kamloops and at Lytton.

Grotesquely formed pebbles of various bright and clear colors were sometimes found in the graves, and these may have been prized as amulets or charms. There were some irregular piles of human bones. In the typical graves the bodies were buried upon the side, with the knees drawn up to the chest. They were often covered with pieces of birch-bark, as was evidenced by small fragments preserved by the dry soil. At the side, in a position indicating that they were buried in a pouch, were found pieces of glassy basalt, points chipped out of the same material, celts, and a number of other implements, varying with each grave. Near the neck elk-tooth pendants were frequently found.

Closely rolled pieces of birch-bark (Fig. 117), varying from an inch to six inches in length, rolled to a diameter of from half an inch to an inch, were found in the hearths, scattered over the village-sites and over the graves. Whether

¹ Some of them are represented in Figs. 4, 48, 55, 56, 57, 66, 76, 91, 95, 100, 114, 115.

² See also Figs. 3 and 40.

³ Some of these objects are represented in Figs. 24, 34, 84, 94, 99.

⁴ Specimens of some of these are shown in Figs. 12, 20, 35, 46, 50, 54, 74, 77, 103, 109, 110.

these originally had paintings or drawings on them is not known, nor is any other use known. Many of them have been partly burned, which suggests their use as torches.

Pieces of birch-bark were sometimes buried with the dead by both the Thompson River Indians and the Lillooets. The latter tribe now extends from some forty miles above Lytton into the valley next west, as far south as Harrison Lake. The Lillooets formerly wrapped some of their dead in birch-bark, and often lined the graves with the same material.

Conclusions. — The prehistoric culture of the interior of British Columbia, as evidenced by finds at Lytton, Kamloops, and Spences Bridge, was quite uniform, although there may have been slight variations in these localities. On the whole, this culture resembles that of the present inhabitants of the interior of British Columbia. The mode of life of the prehistoric tribes, their utensils, their methods of manufacture, and even their customs, must have been practically the same as those of the recent Indians. One of the strongest evidences for the identity of culture is the ability of the modern Indians to interpret the conventional designs found on prehistoric remains.

There are, however, slight differences between the prehistoric and the recent cultures. These are indicated by the change in the style of arrow-heads, which were much larger among the prehistoric people. The ancient type of pipe resembled the prehistoric pipe of Oregon and California, while the recent pipe is practically of the same type as that found on the plains. No indications were found suggesting that the prehistoric tribes knew the potter's art, which, up to the present time, is unknown in this area.

The style of carving exhibited in some of the specimens suggests that at this early time the people of the interior of British Columbia were influenced by the coast tribes, who have developed a very high plastic art. The use of slate fish-knives and harpoon-points may be due to the same cause. The occurrence of dentalium and olivella shells, and of pendants made of the shell of *Pecten caurinus* and abalone from the Pacific coast, prove the existence of intertribal trade in that direction. On the whole, however, the prehistoric culture of the interior of British Columbia shows greater affinity to that of the western plateaus than to that of the North Pacific coast. Up to this time we have no evidence of a change of type or of a material change of culture since the earliest times of which we have knowledge.

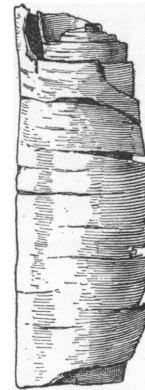


Fig. 117 (3488). Roll of Birch-Bark. Found in excavating. $\frac{1}{2}$ nat. size.

PLATE XIII.

EXPLANATION OF PLATE XIII.

- Fig. 1. (Cat. No. 520).—View up the Fraser River to the northward from Lytton, B. C. The Thompson River is seen joining the Fraser from the east. The noted burial-place at Lytton is located on the barren slope beyond the road-bridge. Stein Creek joins the Fraser from the west in the distance. The nearest land on the left is the ranch cultivated by Chinamen.
- Fig. 2. (Cat. No. 528). — View across the Fraser River to the westward from a point on the government road about half a mile north of Lytton, B. C. A village-site and burial-ground, known as the "Sixth Site," was located among the first bushes on the opposite bank. A house-pit, or depression where an underground house had been, is seen in the foreground. It measures thirty-nine feet in diameter from the inside edges, and is practically a circle, the diameter at right angles to this being but two feet shorter. The corresponding measurements from the outer edges of the surrounding ridge are fifty-three feet and forty-nine feet. The bank between the points where these measurements were taken is from twenty to thirty inches above the level of the ground ; and the depth of the hole at the centre is approximately six feet.

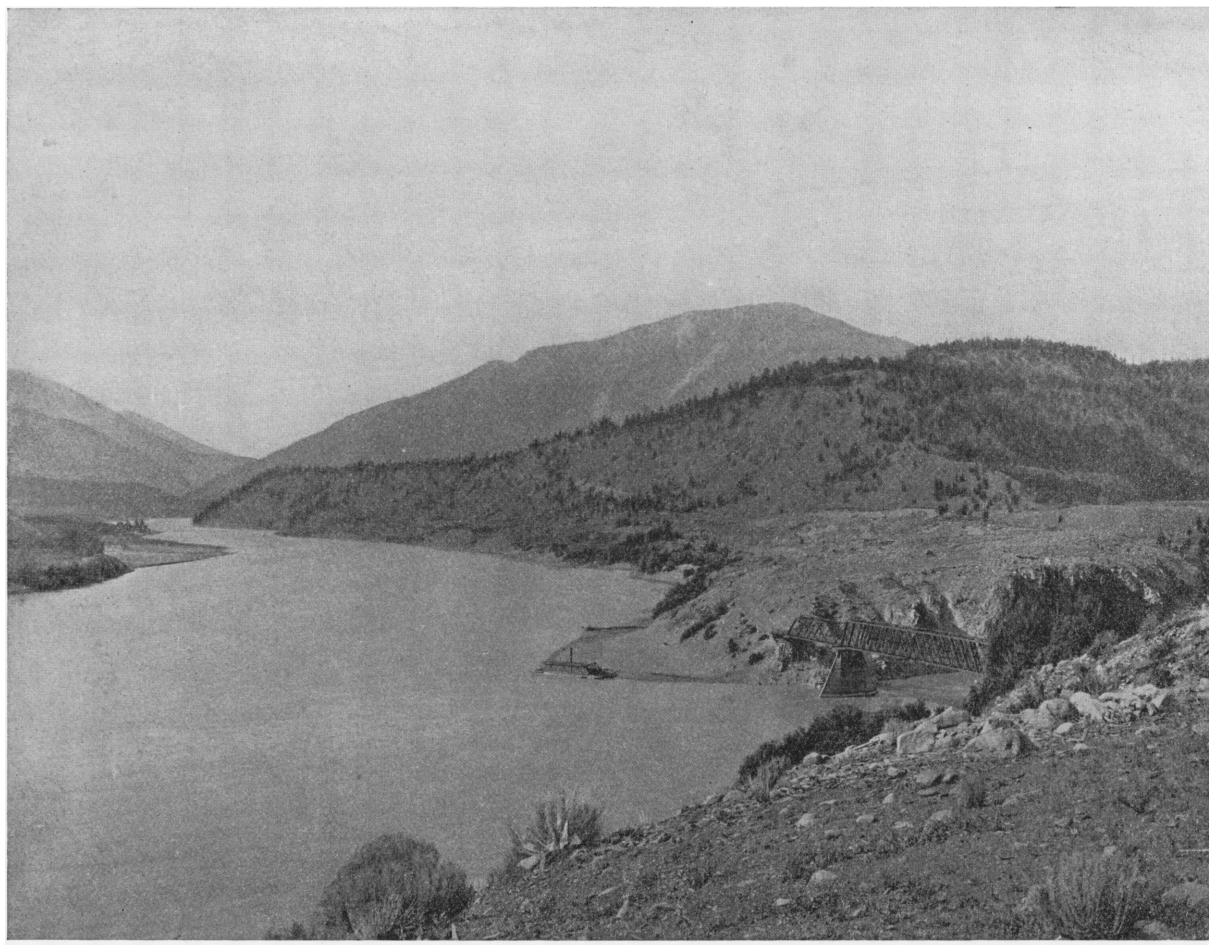


FIG. 1.

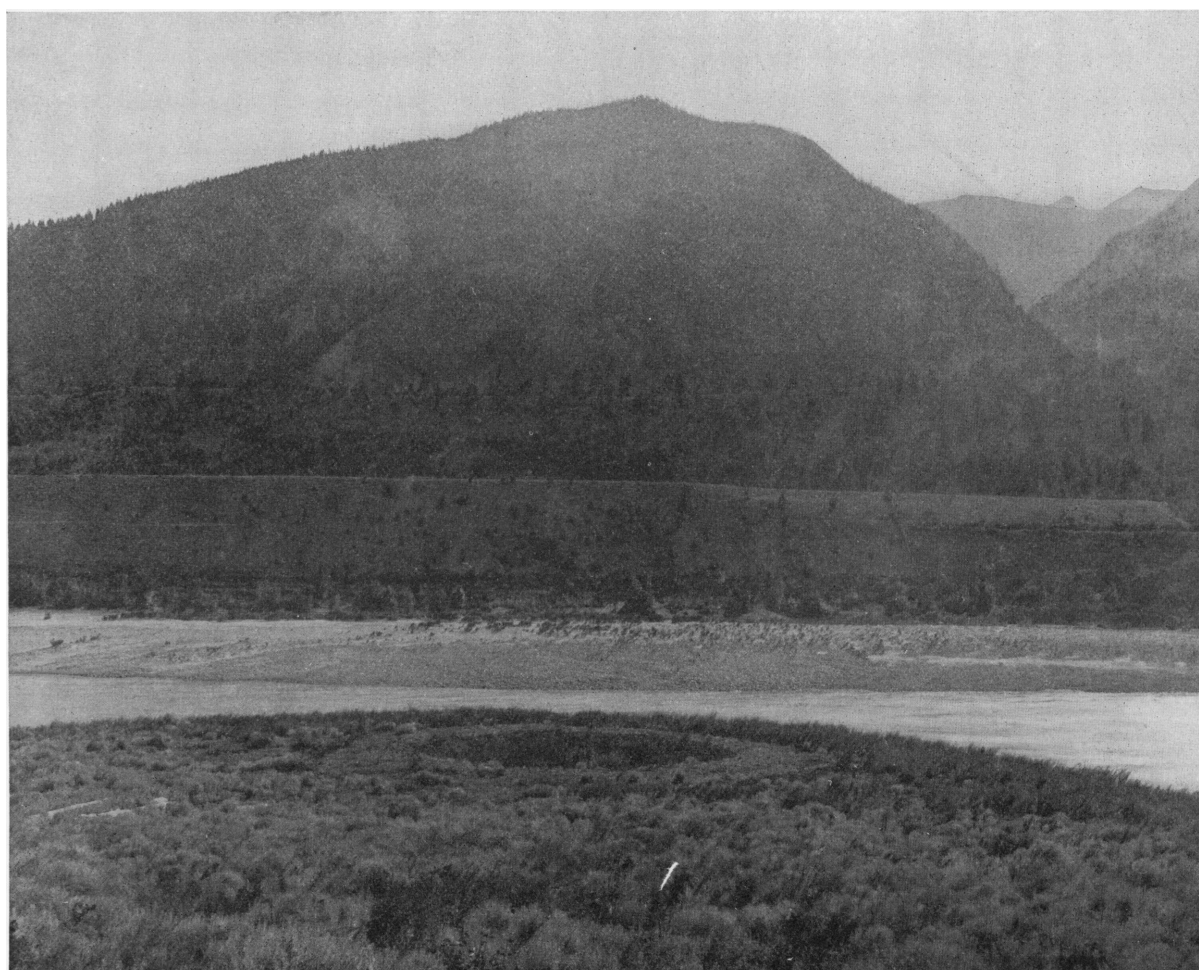


FIG. 2.

Archæology of Lytton, British Columbia.

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