

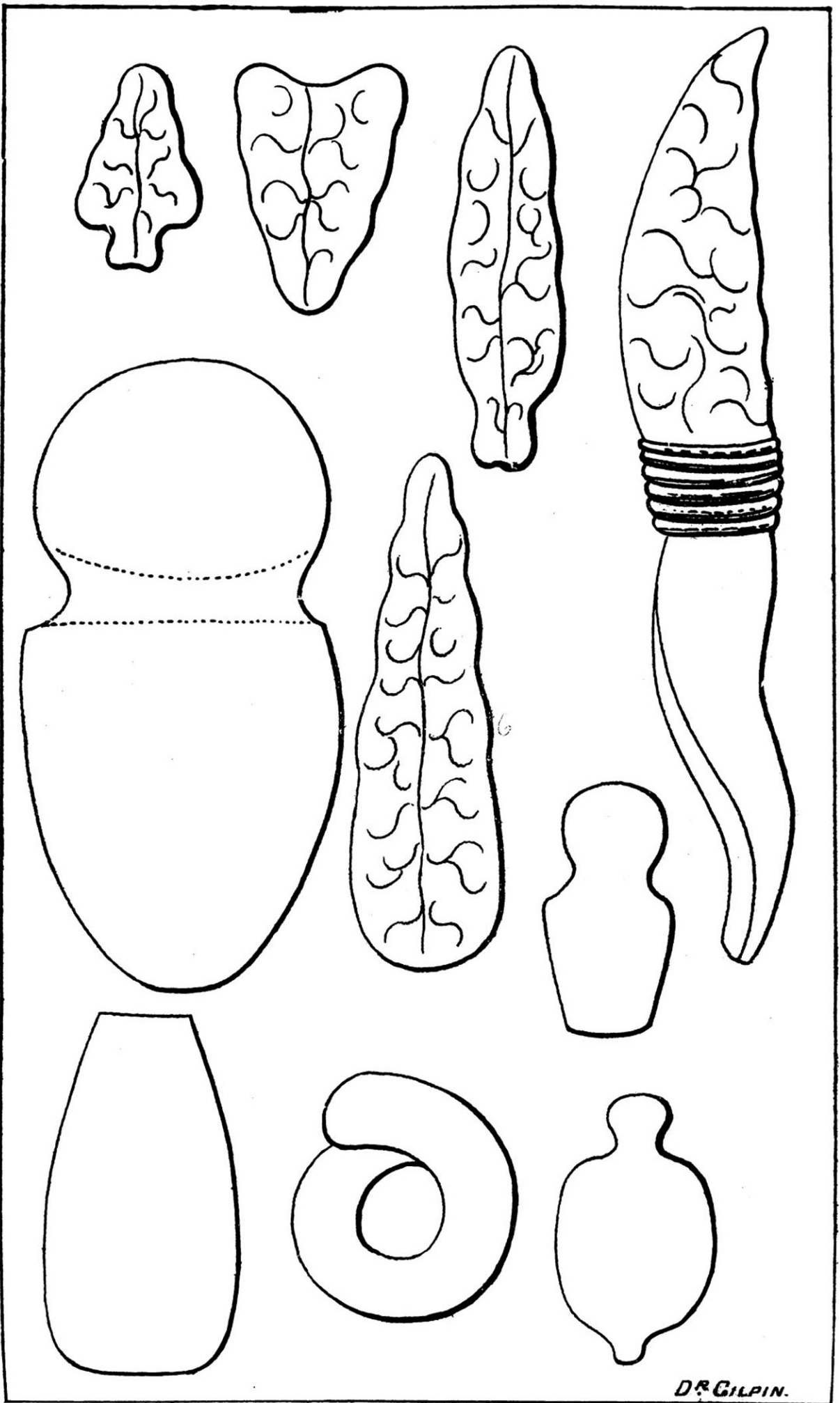
found its way into the fissure to die, or the body must have by some means been carried in, previous to the washing down of the lead ore from higher levels, or before the waters carrying the lead in solution precipitated it on these remains. A mineral vein is a most unusual position in which to find organic remains; and the modernness of these clearly demonstrates the changes which mineral veins are subject to under the favorable conditions which this region presents.

ART. IV. ON THE STONE AGE OF NOVA SCOTIA. BY J. BERNARD GILPIN, A. B., M. D., M. R. C. S.,

(*Read Feb. 10, 1873.*)

WRITERS upon the Stone Age of the old world know nothing of the habits, the manners, not even the forms of the prehistoric men who fashioned those stone axes and celts, (almost their only record) which have of late excited so great interest. The age of Bronze is a myth. The age of Stone has swallowed every myth in its fabulous antiquity. Not so when we study our own stone period. We know from contemporaneous writers their forms, their habits, their clothing, their wars, their peaces; we can bring to the mind's eye the brown hands that toiled over pointing an agate, or ground down the edge of an axe,—the dusky red man who fished the short summer, hunted the long winter, eat of no bread, asked nothing of the fair land he lived in, but shelter for his game, and its profusion of wild berries which it cost him no toil to gather.

Among the gentlemen who followed DeMonts in planting in the year 1603, the French colony at Port Royal, now Annapolis, Nova Scotia, was LesCarbot. From an old and rare translation (London 1712,) of his original work published 1607 in France. from the library of T. B. Akins, Esq., I quote the following particulars of the habits of our Nova Scotian Indians, at the period of 1603, now two hundred and seventy years gone, and what may be called the end of their stone age. When it began, we can scarcely conjecture.



Our Indian was clothed ; he wore a waist belt of leather prepared from moose or caribou skin, an end or flap of which passed between his legs and fastened behind ; over this was a cloak of skins, tied by a leather thong about the neck. In camp he usually cast this cloak off, and went with one arm bare. Neither sex wore any covering upon the head, and the woman was clothed alike, except that a belt kept her cloak tight to her figure. When exposed on the water, or hunting in the snow, he put on long sleeves of skin, fastened to each other by a thong, and long stockings of the same, reaching and tied to his waist belt. These "hosen" were ornamented on the outside by tags of leather. These tags or fringe is the universal ornament of the entire continent, seen in the present suits of the Rocky Mountains, and found in the selvaged and scarlet edge of the blue cloth stocking of our day. The custom of tying the fur mitten about the neck is still preserved by the Labrador settlers, though lost by the Indian. Stout moccasins complete his dress. His wants were simple : food, shelter, and defence. The easiest obtained food was fish, consequently he fished eight months of the year on the sea-coast. Smelts, herring, shad, gaspereux, salmon, trout, and eels, were taken, by damming the rivers with stone and wooden dams, and leaving an opening through which the fish in passing and returning from spawning must pass, and be taken by spearing, or in a basket. Shell fish always furnished an inexhaustible supply. The ocean fish were taken by bone hook, though already the steel hook was beginning to supplant them. When the winter drove the fish to deep soundings, then his food was the flesh of moose, caribou, bear, beaver, with the smaller game of hares and raccoons. In moving from the sea coast to the interior forest, he needed some vehicle to transport his few properties ; the skins and bark for his wigwam, his rude pots, his bows and arrows, and weapons of defence or the chase. The canoe built of birch bark was always on hand. (A smaller boat of platted willows covered with gum seems to have been lost out of all tradition.) His shelter, his camp or wigwam may be seen unchanged at the present day, with its poles drawn to a top centre, its covering of bark, and its spreading circle below, or in the rude circular stone walls which may still be seen standing on

the stony beaches of the Bay of Fundy, and looking as if they had stood there three hundred years. For defence against his enemies he made a stockade, that is he lashed the boles of contiguous trees together in the form of a square, thickening them with branches and other poles, and raised his wigwams inside the square. For defence of his person in war, he bore a shield doubtless made of wood and skins, and carried a bow, strong but not very fine, on his back, with a quiver filled with long polished arrows feathered with eagles' feathers, and a war club in his hand.

Two hundred warriors naked to their waist belts, thus armed stepped out before LesCarbot in dancing measure at St. John River. They had come from Gaspé at the command of Membertou the great Annapolis Sachem, to join the St. John Indians, and his own people in the war they were waging with the tribes beyond the Kenebeck. It is singular there is no mention of scalping in this narrative. Before this, LesCarbot saw them hunting the moose with bow and arrows alone, and in all his narrative there is no mention of spears or javelins, though we find abundant stone heads still. The use of tobacco was universal, using shallow stone pans with quills and reeds stuck in them. This they must have obtained from the tribes west and south of the Kenebeck, as they planted none themselves. There was no planting east or north of the Kenebeck, not from ignorance but rather from idleness as LesCarbot tells us. They ceased to plant, and to make stone clay pots, when they could obtain kettles and biscuit from the French traders, in barter for furs.

With the use of tobacco they had also almost consequent to its use, the power of making fire, at all times and places. The dry punk and the bit of agate was always theirs; but it is probable that the steel and the art were got from the French, who had traded full fifty years before at Canseau. LesCarbot is silent about it. They taught the willing French the use of tobacco, who used it to excess. Thus at the dawn of the iron age in Nova Scotia, we find our stone age man a comely, fairly fed savage, clothed,—a fish and flesh eater,—no toiler of the earth, eating only of that luxuriant berry harvest, to which all our carnivori still hasten, not excepting Saxon man himself, and which seems almost spread as an antidote

to the non-bread-eating man. We find him a man without a house, or key to his front door,—no dweller in cities, save when danger sent him within a stockade of living trees thickened by interwoven branches,—observant of the marriage tie, but with no strong sense of chastity, or feeling of jealousy. Of religion in its modern acceptance he had none; some indefinite belief in a future, acting in no way on the present, and a few medicine men, and soothsayers, was his creed, and his church.

In cooking he had arrived to the point of boiling, making pots of pine and birch bark, hooping them about to enable them to hold water. The water was heated sometimes by throwing in hot stones, at other times by kindling fire beneath: no doubt the bark saturated by boiling vapour resisted the fire. He also used coarse clay pots. As regards his other fare one who has had the good fortune to camp with them in the forest, would see the same process going on before him as their tribes used two hundred years ago. Fish impaled on forked sticks and stuck in the ground about the camp fire; the entire entrails of a porcupine festooned on forked sticks, and roasted till they cracked asunder; whilst the marrow bones of a moose were cracked as perfectly, and the marrow roasted as nicely as ever prehistoric Dane did it in the mythic times of kitchen-midden.

In Newfoundland they boiled eggs to hardness, pounded them to flour and preserved for winter, certainly a hint for modern science in preserving concentrated food. He had not risen to the art of making alcohol, one of the most universal, as well as the first acquired arts of man; nor to letters. He was courageous, liberal in giving, and kind and happy in his domestic relations. "There be some families," saith LesCarbot, "that had they not been Pagans, the Lord would have entered in, and dwelt among them."

For the form and feature of our prehistoric man we must draw upon his present descendant living now, almost under the same circumstances as his ancestors. The skull small, but well developed in the frontal regions,—the eye small, slightly oblique, hidden by the brow above, and the high cheek bone below,—the whole frame slighter than the Saxon, with shoulders that would slope (and do

in the young and women,) but are from their carrying burdens raised upwards, especially the right. The leg is bowed but very fine, the bend high up beneath the knee, and also like the famed Roman tibia rounding forward. The hands and feet fine, especially the instep of the last. A clay-yellow, slight, active, under-sized figure, beardless almost, but with abundant coarse black hair, with intelligent rather than bright eyes, slightly Roman nose, but the nostrils very wide, strong angular jaw, and strong teeth.

Such is the fast fleeting type of our present Indian, and such no doubt was that of our prehistoric man, but with feature and expression intensified by their daily life.

Their daily scramble for food, their hourly fears of enemies or attack, their half clad exposure to the elements, must have all written their marks, now somewhat obliterated in their descendants. The late Dr. Webster, of Kentville, found in old Indian graves so many bones of the fore arm (radius) crooked, that he supposed their shape was modified by drawing a bow.

To the question had not the age of iron come down upon him, had he the power to maintain himself, or to improve his condition? we must answer, the progress would be so gradual, the contingencies so many against him, that he had not arrived yet at any fixed point from which he could not fall back. There is no recorded instance of an inferior race improved by a dominant one. They disappear before them. Many assert they are unable, but it is better to say the progress is so slow that it cannot be measured.

How this Stone Age was conducive to the highest vigor of mind and body, the history of Membertou, the powerful Sachem of Annapolis valley, so graphically touched by the French historian, is a rare record of exquisite beauty.

One hundred years had gone down upon a head on which there was no silver stain; the eye that surpassed the lively Frenchman in seeing at a distance, had had one hundred years of outlook. He loved wine because it made him forget his cares at an age when men have few cares. His active brain was meditating for months and years a war against the tribes beyond the Kenebeck; and he brought his men from Gaspé and St. John River, joining them with his own at a rendezvous at Grand Manan, and himself at that

vast age headed a victorious invasion. Though his sense of his own greatness was such as to demand a salvo of cannon when he entered their fort, yet this far-seeing old man saw at once the inevitable end of his race. He accepted their religion, begged to be taught their arts; he had been a great warrior, and a bloody man in his day, and many years brought many enemies; and he said "I sleep sound, I do not fear my enemies near my friends' fort." When the end came to him, with it, as to most men of unabated mind, came the thronging past. This old pagan, but new christian, longed to rest with his old braves; he feared his soul would not receive the consolation from the annual visit of the tribe to the graves of their sires, but he yielded reluctantly to the worthy fathers of Jesus, who knew how little his example would be unless crowned with christian requiem. And so the young christian Henry (so called in baptism after his brother monarch Henry of Navarre), got his bit of churchyard mould with those salvos roaring over him, which he loved in life, and with such as they honored a General of France.

Far, far more befitting, had the old pagan Membertou, glorious old type of the stone age, been wailed in the soft guttural notes of his women mourners;—had the long procession of canoes, borne him by the light of fires on a hundred hills, to that desolate isle, as LesCarbot says, some twenty leagues away in the direction of Cape Sable,—had his old braves put him to rest in his uncoffined grave, swathed him in beaver skins, shrouded him in birch bark and heaped over him stone axe, agate spear, or jasper arrow-head. This spot lies yet at the foot of the great Rossignol. "Fern clad mounds," (to quote our late member Capt. Hardy,) still mark where the stone men sleep.

In wandering tribes such men mark only their own age. Men must be brought together first, then come laws, letters or recorded law, and the past acts upon the present. Accumulated capital to keep them together, or agriculture, then is the first great step towards civilization—a step which once obtained never goes back. This made the thoughtful remark of Humboldt, "cereals were the bottom of everything." And not having attained this we cannot say whether our stone men would have elevated themselves. Let

us remember that with their dying hand they presented the world with two things, which from their universal use, and from the influence they have excited in the policies, nay, in the very existence of nations, may mark hereafter an age for themselves—Tobacco, and the Potato. The greedy Frenchmen sucked in the new and intoxicating weed till they became insane, and LesCarbot had not seen but heard of a marvellous root like small loaves, hanging even to forty on one root, but of rare flavour.

We have now seen our *men* of the Stone age, let us look for a moment on their *country*. Dense forests crowned the whole Province to the water's edge. Meagher's Beach, the Thrum caps, and Devil's Island, now sandy spits, were wooded headlands to the water's verge. Such an excessive animal life filled the forest, filled the air, filled the sea, nay, even the bottom of the sea, that no one may conceive it, or believe it. The beaver abounded on every stream; the moose came out in sight to browse on the great meadows, which then as now were the great features of the Annapolis valley; sea birds covered the waters and darkened the air; and every spring brought fish innumerable, with their attendant pursuers, dolphins, whales, seals, and walrus, whilst the sands were paved by scallops and clams. Such war as can be made by a stone arrow, or bone hook, did our prehistoric man make upon this army of animal flesh. He seems to have asked nothing of vegetable life save the luxuriant berry harvest, which even yet spreads its purple profusion on our barrens, and whose autumnal stores must have been of incalculable benefit to the satiated flesh eater of the past year.

Again, we often read of dominant races destroying by violence the weaker of the age of Bronze thus dominating over the Stone, by supposition as it were, and to account for these changes. But we read in the history of our own stone men, that there was no violence; that the doom was velvety; if it was inevitable; that it began with the belly; the Indians ceasing to mould stone pots, when they got iron kettles; and that it was indirect. The first iron axe was laid, not at their necks, but at the wood of the trees; the ploughshare entered not their souls, but the broad breast of the

Province. With the trees went the game, followed soon by the eaters of that game.

Let us leave that godly old Huguenot, Mark LesCarbot's graphic touches, and examine what remains our stone men have left behind them. They have left no mounds; they never could have kept men together long enough to build one. They have left many shell mounds in every part of the Province, but near the sea. These collections of oyster and clam shells mixed with bones of fish, birds, and mammals, have not yet been studied with the care they deserve. They are the collection of ages, and would well reward a thorough investigation. They have yielded to a very slight search, arrow-heads, stone chisels, and handles of moose horn.

Again, we turn up graves which may be called of the transition period. Here the warrior rests with stone and iron arrow-heads mingled. The latter were, some with a socket to receive the shaft, others with the tang elongated and pointed to enter it. Again, we find the stone axe and rusting gun side by side. Thus proving how early the French traders accommodated themselves to the needs of traffic. Another grave was opened at Yarmouth whose occupant must have been a great soldier before the Iron age. Full forty stone weapons of beautiful and foreign work, attested his greatness, and in part proved the tradition of a heavy fight by foreign invaders having there been done. These graves so common about New Jersey are exceedingly rare here. Our usual finds are from the fields and cultivated lands. The plough is continually turning up stone arrow-heads, spear heads, axes, gouges, and chisels; but there are various parts of the Province more fruitful than others. A great many are found at Yarmouth, apparently of stone not found now in the province, and of a different work. Annapolis, especially about the tide waters of the LeQuille River, perhaps abounds in them the most, though about Shubenacadie, Musquodobit, and Margaret's Bay, there are good finds.

Of the various stones used—quartzites, hardened slates, quartz, agate, jasper, amythest, trap, a yellow argillite, granite, sandstone, and soapstone, are found. I have seen only one specimen of sandstone, a pipe-bowl, found at Lunenburg, and one soapstone another pipe-bowl, found at Blomedon. I have never but in one instance,

and that so imperfect that I could scarcely admit it, seen granite used. The hornstone pebbles, so common about the Bay of Fundy beaches, though to us well adapted for arrow-heads, seem never to have been used.

The stone instruments resolve themselves naturally into war and hunting implements—arrow-heads, spear-heads, and javelins; and into household ones—hammers, axes, gouges, chisels, hand wedges and knives. There are other implements found, very few in number, and whose uses we cannot apprehend. A stone shaped like an old fashioned gorget with a hole pierced through its flat axis, other egg-shaped stones, like sinkers. The very peculiar stone tubes of foreign stone found on the line of the Dartmouth canal, a very peculiar last shapen stone in the Mechanic's Museum, St. John, N. B.; other flat stones with holes pierced through them; and lastly, two circular stones, resembling a coiled snake, now in the Provincial Museum. These last are so peculiar, and bear so strongly on the universal snake worship papers lately put forward, as in the absence of all tradition or history of such worship in this province, to demand a paper to themselves.

The arrow-heads are barbed and straight, some with tangs, others without; some of beautiful work, others rough. The very characters of the old arrow makers are marked upon their work, and some so small that they must have been playthings. To us they seem all playthings, yet they were fixed to long shafts of great polish, and feathered with the tail feathers of the eagle. An eagle feather was worth a beaver skin, and LesCarbot saw at one wigwam five tame eagles with their tails cut off. The bow, probably of ash, was coarse but very strong, and the French were amazed to see among the dead brought home from the wars, a man and a dog transfixed by the same shaft. Those arrow-heads that I have seen, were chipped in making like those of all lands, except one which I own; that is polished like a celt, and is of hardened slate.

The spear-heads are the next numerous. They seem to have been both spears to carry in hand, and javelins to cast. They are also made by chipping, and are usually formed like the unbarbed arrow. A long oval with cutting edges and tang on the handle to fasten the shaft with. Many of these are so blunt and so broad,

that one can scarcely distinguish them from knives. The knife has one convex and one straight edge, and is immediately known. A very fine one of hard red slate is in the museum of the St. John Institute.* They doubtless were fitted with wooden handles. Among the spear-heads are the beautiful ones found at Yarmouth, which have a centre line of elevation, and a beauty of shape and finish, and foreign air. With the exception of a large barbed arrow of amythest found on Digby Neck, they are the most beautiful found in the Province.

These finish the chipped stone. The next are hammers, axes, gouges, chisels, and what I term hand wedges, all ground and polished stones. The axes at once divide themselves into those with grooves around their centre, and the smooth ones. These weapons must have been used as wedges, and driven by mallets. They never cut a forest tree down with one. Indeed the stone men meddled little with great trees, and they used fire when they did. They made their stockades with living trees. For fire wood they collected windfalls. It was a folly to see the prisoners and women go leagues to collect dead wood, saith LesCarbot, when they were living in the forest. On the other hand, they are well adapted to splitting wood in all its forms,—to splitting bark from the birch trees, and to scraping the raw skins, breaking the grain and forming them into leather. When we find that the women did all these matters, built canoes, platted mats, and skinned the game, we are not surprised to find so many of them small, and running into hand axes, or wedges. Many of them have a groove for the left hand thumb to hold them by, when striking them with a mallet-head in right.

The coracle or boat built of wicker has ceased even in any tradition, but should not be lost sight of as an ethnological fact, connecting them with prehistoric men of the old world. I have attempted to restore handles to some of these axes, from our know-

* Joe Glode, an admirable hunter and Indian, now dead, once shot a moose in the forest at Annapolis County, and having no knife, immediately took the flint out of his gun, bled and dressed the carcass with it. The Indians were a long time before they used percussion locks. The close cover and twigs of trees did not suit their careless handling. "See good many Indians no fore finger now, never saw them before *cussion guns*," was the sage remark of old Jack Glode.

ledge of those still in use. In cutting their skins and sowing them, they must have used bone implements, now lost. Some northern tribes fix the beaver's tooth into a wooden handle, and even carve stone with its hard enamel. Our Indian no doubt used that as well as bone hooks, and perhaps bone fishing spears. We find no stone fishing spears as are found towards the south, which makes me suppose they made them of bone. The small cannon bone of the moose is well adapted for this.

The chisels or wedges with long handles as well as the gouges, I think were used also in making arrow-heads. The hollow of the gouge preserving the fine edge. We now know these were made by bedding the stone firmly in wood, and making each chip by a smart blow. The gouge struck by a mallet seems well formed for this work. Some of these chisels may have been fixed in handles, and used as adzes. The pipe bowls speak for themselves. Their numbers are very few in comparison; and we end with implements which either seem ornamental, as the gorget looking stones which have been suspended around the neck—or the long oval stones which may have been sinkers on fish lines. All these are very rare. The finely polished stone tubes found in one instance only at Dartmouth, have their fellows in the mounds of the Western U. States. We may only conjecture how they came there, as well as the stone coiled Snake, of which two only are known, and both in the Provincial Museum.

Of all these, the arrow heads are the most numerous, then the axes, hand axes and chisels, which are about as numerous as the spear and javelin heads, — gouges and unmistakable knives very rare, and the rest exceedingly rare.

The peculiar Serpent Stones in the Provincial Museum were found upon the surface, about sixty miles apart. The largest is three and one half inches on its long diameter, three on its short, with a very rude resemblance to a snake's head coiled above the tail. The other is about three inches in its long, and two and one half in its short diameter, and closely resembling the other. They are both of marble. There is no tradition of Snake worship but they evidently appear charms.

