II.

ANTIQUITIES OF THE COPPER REGION OF THE NORTH AMERICAN LAKES.
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In the month of June of this year (1855), I availed myself of the leisure of the long vacation to make a trip into the wild West, and accomplished a voyage through the whole extent of the Upper Canadian lakes, from Georgian Bay to Fond du Lac and the River St Louis, at the extreme west point of Lake Superior. In this trip I had opportunities of observing the Red Indian in his native state, as well as of making observations which I had long desired to be able to do, on the half-breed Indians; and having also met with some relics of archæological interest, it occurred to me that a notice of these, as well as of others that have come under my observation, might not be unacceptable to some of my old friends in the S.A. Scot.

On the southern shores of Lake Superior is the great copper region, already celebrated for its vast mineral treasures, and especially interesting to the antiquary for the remains of ancient copper mines wrought by native metallurgists long prior to the intrusion of Europeans on this western region. The evidences of this I was exceedingly anxious to explore; and accordingly I landed at Ontonagon, a small settlement at the mouth of the river of that name, where traces of such ancient works are said to be visible. The Indian mines I did not see here; but only a few months before my arrival, an interesting discovery of ancient weapons and tools had been made, in levelling an area on the banks of the River Ontonagon, for the purpose of burning bricks. The ground had been covered with large old pine trees, certainly, as I was assured, upwards of a century old; and some feet beneath their roots lay a collection of copper spear-heads and gouges, which I saw, and made sketches of. One of the spear-heads, which I measured, is 11½ inches long, and 1½ in greatest breadth. It is of hammered copper, evidently made without the use of fire, and is in shape somewhat like a bayonet, but instead of the socket, having two flanges bent towards each other, without meeting, such as I have seen on some of our primitive Scottish bronze relics. The copper, I may mention, is found in this region in immense masses, perfectly pure and malleable, so as to admit of working in the manner I suggest without smelting, or indeed any distinct appreciation being needed by its aboriginal

workers of its essential difference from the rocky matrix out of which they made their mauls and chisels with which they separated the native copper from the rock. I subsequently landed at Eagle River, and went some miles into the bush, to visit the most celebrated of the American copper mines,-the Cliff Mine. I descended this mine, and in some of the levels literally walked through passages cut in the native copper. One single mass quarried from this mine measured 50 feet long, 6 feet broad, averaged 6 inches in thickness, and was estimated to weigh 80 tons of pure copper. At the latter locality traces of ancient mining are observable, and there I saw some of the stone mauls made out of the native trap-rock, which forms a range of magnificent cliffs rivalling in proportion those of Salisbury Cliffs, which they closely resemble, excepting in this, that instead of presenting a bare slope of crumbling debris, like that which slants upward from the western sweep of the Queen's Drive, they are covered with magnificent old pine and hardwood trees, which greatly add to their effect. The stone mauls are rounded at both ends, and have in the middle a groove, by means of which they must have been fastened to a handle, or wielded by means of a bough bent and secured round them. I have seen precisely such mauls found in ancient English copper workings. Here they have been met with in such abundance, that I was told of a well having been built almost entirely of them.

To this northern copper region American archæologists are universally agreed in referring the source of most, if not all, the copper tools found in the ancient burial mounds of the Mississippi Valley, and other parts of the continent equally remote from the northern lakes; and in proof of this a very singular class of Indian relics may be quoted. This consists of certain large species of the sea shells of the Gulf of Mexico, and the West Indian Islands, popularly known as conch shells, and of articles of personal ornament fashioned from them. One of these large tropical shells, marked with traces of artificial changes wrought on its form and surface, attracted my attention soon after I first visited Canada, in a collection of Indian antiquities belonging to the Rev. Dr M'Murray, a brother-in-law of Dr Schoolcraft, the well-known ethnologist. This, I learned, had been obtained from a grave mound in the vicinity of his residence at Dundas, in Western Canada. Since then other examples have come under my notice, all of them found in northern inland regions of this continent, and under circumstances, or in such condition, as to indicate their pertaining to the archæological remains from whence information may be derived relative to the ancient history of this American continent, and the races by whom it has been peopled. Two of these tropical American shells, both of them specimens of the Pyrula perversa, the native habitats of which

are the Antilles, and the Bay of Campeachy on the mainland, have been recently presented to the Museum of the Canadian Institute at Toronto, not as specimens of the conchology of the tropics, but as Indian relics pertaining to the great northern chain of fresh-water lakes, where no such shells could naturally be looked for. The first of these was accidentally discovered in an Indian grave-mound at Nottawasaga, on the Georgian Bay, and along with it was found a gorget made from the same kind of shell. The second example, which bears unmistakeable evidence of having been artificially cut with very rude implements, was brought from the Fishing Islands, near Cape Hurd, on Lake Huron. A third specimen, which I have obtained possession of, constituted one of the contents of a large sepulchral depository on the shores of Georgian Bay. near Owen's Sound. It was found lying at the head of a skeleton, in one of a group of Indian graves, along with a copper kettle and other relics; and the surrounding graves are reported to have contained additional specimens of those large tropical shells. The example referred to has the upper whorls cut off, so as to expose the internal canal. Five lines or notches are cut on the inner face, and it is perforated on the inner edge, seemingly for the purpose of attaching some ornament to it. As the discovery of such shells so remote from their native locality is a just subject of curiosity, I may refer to examples noted by others.

In various districts of North America ancient sepulchral deposits of a peculiar kind are met with, containing heaps of human bones promiscuously mingled together. About the year 1837, one of these Indian ossuaries was accidentally discovered in the township of Beverley, Canada West. An elevated ridge, running from north to south, was covered by an old growth of full-grown beech trees, standing somewhat widely apart; and across this, and consequently running from east to west, a series of trenches were uncovered consisting almost entirely of human bones. These lay in immense numbers, of both sexes and of all ages, promiscuously heaped together, and interspersed with many Indian relics, which furnished the chief temptation to their exploration. These depositories of human bones are referred to by Dr Schoolcraft in his "History, Condition, and Prospects of the Indians," as especially characteristic of the ancient period of occupancy of the upper lake regions, and are described by him as consisting of "sepulchral trenches or ossuaries, in which the bones of entire villages would seem to have been carefully deposited, after the bodies had been previously scaffolded, or otherwise disposed of, till the fleshy parts were entirely dissipated, and nothing left but the osteological frame." In commenting on this Indian sepulchral rite, he further observes: "A custom of this kind may be supposed to intervene, in the history of nations, between that of burning the body,—which is still practised, we are told, among the Tacullies of British Oregon or New Caledonia,—and that of immediate interment, so generally practised.

On this question, however, I have obtained information leading to a different inference. On inquiring of Mr Paul Kane, a Canadian artist, whose practical knowledge of Indian rites and customs is derived from the experience of years spent in travelling among the northern tribes as far as the shores of the Pacific, he informs me that in the above remarks the American ethnologist confounds the sepulchral rites of two entirely distinct classes of Indian tribes. Among the Chippewas, Pottowatamays, the Menamonies, the Ottowas, and the Indians of the Six Nations, the practice prevailed of interring their dead in large scoulchral depositories. The bodies, among the tribes still retaining this custom, are objects of sacred regard and reverential care during the intervening period between the first funeral rites and the final feast at the grave, which frequently extends over many months; but after the final honours and sacrifices have been offered to the deceased, he is believed to have reached the spirit hunting-grounds, and then all care ceases, and the bones and offerings to the manes of the dead are sooner or later promiscuously gathered into the common ossuary. This custom fully accounts for the immense trenches filled with human bones intermingled with Indian relics. One of those opened at Beverley, and carefully explored, was found to measure forty feet in length, with a breadth of eight feet; and throughout this entire area it consisted, to a depth of six feet, of a solid mass of human crania and bones. The other practice, which Dr Schoolcraft supposes to be only the preliminary stage of the one described above, constitutes the entirely distinct and final sepulchral rite of other tribes lying to the north and west of the former, including the Chinouks, Kliketats, Coulitz, and all the Indians of the Columbia River. These tribes all deposit the corpse on a scaffold or raised platform above ground. The most common and characteristic bier is the canoe, raised on poles, and decorated with relics pertaining to the deceased, and with the offerings of his friends. These Indian biers are invariably erected on an isolated rock or island, inaccessible to beasts of prey, and are regarded as the final resting-places of the dead. I have examined with much interest a series of drawings executed by Mr Paul Kane. of the canoe-biers, constructed by a tribe of the Flat-Heads on Vancouver's Island. I was struck with the fact, which I learned at the same time, that all the copper kettles, implements, &c., deposited on these biers are broken and rendered unserviceable. This is not done from any idea of preventing their abstraction, as no Indian would profane the grave, however great his need for such articles. To me it suggests a curious psycological affinity with the

practice of the Scottish bronze period, of breaking the leaf-shaped sword before depositing it beside the dead warrior.

Returning to the subject of the discovery of tropical marine shells in the regions of the great northern fresh-water lakes, I have specially referred to the Beverley ossuaries, in order to note the discovery there of various shell-beads, a worked gorget made from a large shell, with the original nacre of red partially remaining, and two entire specimens of large tropical sea shells, along with numerous clay pipes, copper bracelets, amulets of red pipe-stone, and personal ornaments of various kinds. One of the shells is another specimen of the Pyrula perversa, and the other is described as the Pyrula spirata, a large shell, if I mistake not, peculiar to the western coasts of Central America. The shell-beads also appear to be of precisely the same kind as some described in the "Transactions of the American Ethnological Society," which were discovered far south in the Grave Creek mound in Virginia: thus supplying another indication of intercourse between the north and south. The interest which pertains to those Indian relics manifestly depends on the fact of thus discovering along the shores of the great inland chain of fresh-water lakes specimens of the large tropical sea-shells of the Atlantic and Pacific Coasts of Central America, and of the West Indian Isles; while from the grave-mounds of the south, copper relics are found, believed to be derived from these remote northern regions.

The attractions offered by those and other allied species of the large and beautiful tropical shells are sufficiently apparent, and are by no means limited to the untutored tastes of the Red Indian of America, nor to the products of the Mexican coasts and the Antilles. The Pyrum, and others of the large and beautiful shells of the East Indian seas, of the species Turbinella, are highly prized by the natives of the neighbouring districts; and this is especially the case with a sinistrorsal variety which inhabits the coasts of Tranquebar and Ceylon, and is made use of by the Cingalese in some of their most sacred rites. The greater number of the genus Pyrula are dextrorsal, or rise in a spiral line from right to left, so as to present the mouth on the right side when held with the elongated canal or tube downwards; but such is not the case with the two American species referred to.

In the East Indian seas examples of sinistrorsal monstrosities of the native species are occasionally met with, and are highly prized. Such reversed shells of the species *Turbinella* are held in special veneration in China, where great prices are given for them. They are kept in the pagodas by the priests, and are not only employed by them on certain occasions as the sacred vessels from which they administer medicine to the sick, but it is in one of these sinistrorsal *Turbinella* that the consecrated oil is kept with which the Emperor is anointed

at his coronation. Specimens of these shells, curiously ornamented with elaborate carvings, are in the British Museum.

The discovery of tastes or habits common to races of the human family, widely separated either in point of time or by inaccessible geographical position, is always a just subject of interest, and thus confers a certain value on the relics referred to, as supplying one element of comparison between races of the old and the new world. But it is chiefly as proving the existence, at some former time, of an intercourse having subsisted between widely severed northern and southern regions of the American continent, that the tropical marine shells found in the regions of the great lakes of the north are of value to the archæologist.

In the great basin of Lake Superior, and in the higher latitudes beyond, the traces of older occupation are almost exclusively connected with the ancient copper workings. No sepulchral remains, such as abound in the southern Mississippi valley, have hitherto been observed; and flint arrow or spear heads, hatchets, pipes, and other relics, appear to be scarce. It must be remembered, however, that the country is still an uncleared wilderness. I sailed along the shores of Lake Superior for hundreds of miles, looking only on sand bluffs and rocky cliffs covered with the primeval forest; and the principal freight of the vessel in which I sailed seemed to be hay for the horses and cattle required at I repeatedly landed, and went some miles into the country, travelling through dense forests, but I saw no clearings and scarcely a trace of agricultural operations, even at the mining locations. But it is in this wild region that the great mineral treasures abound, which attracted the attention of the native Indians long before the discovery of America by Columbus or Cabot, and, in that prehistoric period of the New World, furnished the chief element of traffic, and the consequent source of intercourse, between the north and south.

I have referred to the working of the copper by the Indians of Lake Superior, without any skill in the metallurgic arts, and, indeed, without any precise distinction between the copper which they mechanically separated from its native matrix, and the unmalleable stone or flint out of which they were ordinarily accustomed to fashion their spear and arrow heads. "The copper," says an American writer (Mr Whittlesea), in referring to the implements found in southern grave-mounds, "is apparently cold wrought, and does not show that it has been melted. It must therefore have been found by the mound-builders in its native state; and there are no mines in North America known at this time where native metal can be had except those of Lake Superior." This, I may remark, serves to confirm ideas already expressed by me in the "Prehistoric Annals," and oddly misunderstood by some learned critics. It is there observed

(p. 214), in reference to the possible use of metals in the stone period—paradoxical as that may seem-". It is not impossible that the working in gold may have preceded even the age of bronze. If metal could be found capable of being wrought and fashioned without smelting or moulding, its use was perfectly compatible with the simple arts of the stone period." It is to be borne in remembrance, that the metal weapons and implements of America's sepulchral deposits are not of bronze, like those of Europe, but of pure copper. "This metal," Dr Schoolcraft remarks, "was employed by the Indians in making various ornaments, implements, and instruments. It was used by them for arm and wrist bands, pyramidal tubes, or dress ornaments, chisels, and axes; in all cases, however, having been wrought out by mere hammering, and brought to its required shapes, without the use of the crucible, or the art of soldering. Such is the state of the manufactured article, as found in the gigantic Grave Creek mound, and in the smaller mounds of the Scioto valley, and wherever it has been scattered, in early days, through the medium of the ancient Indian exchanges. In every view which has been taken of the subject, the area of the basin of Lake Superior must be regarded as the chief point of this intermediate traffic in native copper."

As an evidence of this ancient traffic subsisting between the widely distant north and south, the conchological relics above referred to are of peculiar value. Whatever doubt may be thrown on the derivation of specimens of ancient native manufacture, or of the copper found in sepulchral and other deposits of the Southern States and in Central America, no question can exist as to the tropical and marine origin of the large shells found in far inland northern districts lying between the Huron and Ontario Lakes, or the still remoter islands and shores of Georgian Bay, at a distance of upwards of two thousand miles from the shores of Yucatan on the mainland, where the *Pyrula perversa* is found in its native locality.

It is obvious, from the large and cumbrous size of the American Pyrula, that they must have possessed some very peculiar value or sacredness in the estimation of the Indian tribes of the north to encourage their transport from so great a distance, through regions beset by so many impediments to direct traffic. Their transport to the Canadian lake regions appears to have been practised from a very remote era. They have been found there in an entire state among traces of Indian arts, which Schoolcraft supposes to be "relics of the ante-Cabotian period." From the circumstance of their discovery in sepulchral mounds, and their being found laid at the head of the buried chief, with his copper kettle and other peculiarly prized relics, the American Pyrula would appear to have been held in no less veneration than the Asiatic species now are

by the native Cingalese, or the more civilized and cultivated priests of China. Though the decorations of the American shells in no degree partake of the elaborate carving of the Chinese sacred Turbinella, yet the examples referred to are generally more or less marked and ornamented. The shell described above, from the vicinity of Owen Sound, in Georgian Bay, in addition to the marks of artificial workmanship already referred to, exhibits abundant traces of its long and frequent use. The surface is smooth and polished, as if by constant handling, except where it is worn off or decayed, so as to expose the rough inner laminæ of the shell; and all the natural prominences are worn nearly flat by frequent attrition. We should not probably greatly err in assuming the Pyrula, thus venerated by the ancient Indians of the great Canadian lakes, to have corresponded to the Conopas, or rude penates of the Peruvians, as described by Rivero and Von Tschudi. Any singular or rare object in nature or art seems to have sufficed for one of these Peruvian minor deities, amulets, or charms. "Every small stone or piece of wood of singular form was worshipped as a Conopa. These private deities were buried with their owners, and generally hung to the neck of the dead." The choice of the sinistrorsal Turbinella by the Cingalese and Chinese obviously arises from the same psychological characteristic: and it is easy to conceive of the wonder with which the northern Indian must have contrasted the gigantic tropical Purula with the miniature molluscs of his own lake shores.

Trifling as such relics of Indian superstition, or of the ancient and rude traffic of barbarous tribes may appear, they are not without some value, both in regard to the light they throw on the ancient history of the American continent, and also, perhaps, in respect to some of the forms in which the progressive civilization of its new occupants may be modified by the same physical causes which largely controlled the ancient intercourse between north and south, east and west. Looking back into the most ancient history of Europe, we find that that continent also had its northern mineral treasures; its tin, pertaining to the Kassiterides, or British Isles; and its amber, found there, as now, in most abundance on the shores of the Baltic. But it was by maritime intercourse, through the agency of the Phœnician merchantmen of Asia, that the north of Europe exchanged its mineral treasures for the coveted possessions of regions lying towards the tropics. Herodotus, in the earliest known reference to the British Isles as the source of tin, refers to them only to declare his total ignorance in regard to them; and in noticing the rumour that amber is brought from the same northern sea in which these islands are situated, he says:-"Though giving much attention to the subject, I am not able to hear of any one that has been an eye-witness that a sea exists on that side of Europe."

Even to the Romans of the Christian era all that lay beyond the Rhine and the Danube was clothed in vague mystery, and Northern Scandinavia retained for many centuries thereafter the Pagan creed and unadulterated northern manners. Much of this is unquestionably traceable to the broadly-marked physical features of the European continent. Its surface is broken up by numerous large mountain ranges, and its coasts are indented by bays, estuaries, and land-locked seas, by means of which its various populations are even now isolated, and its political subdivisions fixed to a great extent by clearly-defined natural bounds.

Altogether different is it with the American continent. I have travelled from the Delaware to the St Lawrence, and from the Atlantic to the River St Louis, at the head of Lake Superior; and even including the grand scenery which the latter discloses, there is more variety to be seen in a single ride of fifty miles in the Scottish Highlands than in all the thousands of miles I have traversed. The great levels of this continent are so little broken, that not only the boundaries of properties and townships, but even of states and provinces, are drawn without reference to any natural features of the country, excepting in the case of the great lakes, the River St Lawrence, the Rio Grande, and very partially in that of the Mississippi; though the latter is fit to be the boundary of any empire.

While the uniform aspect of so large a portion of the American continent must have facilitated the wandering of its native tribes, its river communication furnished a means for the traffic between the north and the south, which was impossible with the old Alps-divided Europe, with its isolated peninsulas. The most important navigable river of Europe—and still more important, perhaps, in relation to its ancient history—the Danube, flows from east to west in one parallel of latitude, and through a population rendered somewhat homogeneous by the influences of climate and all external circumstances; but the Mississippi and the Missouri flow together through 20° of latitude, with all the varieties of climate still further increased on a continent which extends its widest area within the arctic circle.

Europe never can have been for any length of time the area for a nomadic population; whereas in America, with its great unbroken levels, even the homeloving Anglo-Saxon becomes migratory, and seems to lose in a degree his old characteristic of local attachment. In Europe the diverse ethnological elements are still kept apart by its physical features. The Iberian of antichristian centuries survives in the Pyrenees, and the Gaul and Briton of the first century have still their representatives on the coasts of Brittany, and in the mountains of Scotland and Wales. But on the American continent a nearly homogeneous aboriginal population appears to have occupied its entire area; and now that its

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ancient tribes are being displaced by the colonists,—that Spain, England and Ireland, Poland, Hungary, France, and Germany, pour unceasingly on its shores, the old world's ineradicable distinctions of Iberian, German, Celt, and Saxon,—appear to vanish almost in a single generation. When it is considered how largely all European history has been affected by the peninsular character of Greece and Italy, and by the insular character of Britain, as well as in a lesser degree by the geographical isolation of Spain, France, Denmark, and the Scandinavian peninsula—how much indeed the history of lowland and highland Scotland is due to the physical features of the country—it is impossible to overlook in this a key to some of the contrasting elements of fusion noticeable on the American continent.