

ing ten lithographic plates, accompanied with a descriptive narrative, giving the history of each exhumation, an account of any antiquities disinterred with it, and also, when necessary, illustrations of such, along with exact measurements of the skulls, similar to those furnished by Dr. Morton. The collections of the Society of Antiquaries of Scotland, the Phrenological Society of Edinburgh, the Royal Academy of Dublin, and of various other scientific bodies, have been placed at the service of the authors, and both the Royal Society of London and the British Association for the advancement of Science have granted pecuniary aid towards the requisite investigations.

When the importance of such evidences of the physical characteristics both of extinct and living races, in relation to historical investigation, is thus becoming so widely appreciated, it appears to be desirable that Canada should not lag behind in the good work. Such a collection of native Crania as that with which Dr. Morton has enriched the Cabinet of the Academy of Sciences of Philadelphia, would form a valuable addition to the museum of the Canadian Institute, and many facilities undoubtedly exist for its attainment. Every year agricultural operations are extending into new districts, and breaking up virgin soil. In the progress of clearing the ancient forests, and bringing the land into cultivation, places of sepulchre must frequently be invaded, where the remains of the long-buried chief lie undisturbed, alongside of specimens of the rude arts which furnish proofs of the condition of society to which he belonged. Railway and other operations are in like manner leading to numerous extensive excavations in regions hitherto untouched by the spade or plough; and these also must frequently expose to view similar relics of the ancient or more recently displaced aborigines. It is scarcely to be hoped that the rude railway navvy, or even the first agricultural explorers of the wild lands of the North and West, will greatly interest themselves in objects of scientific curiosity; but now that the members of the Canadian Institute are scattered over nearly every district of the Province, it may be hoped they will be found prepared for hearty coöperation in all such objects, and that by such means the museum of the Institute may become, through time, an object of just pride and interest to the community at large.

In many cases the condition in which the skulls and other remains of the former occupants of our Canadian clearings are found, is such as to present no obstacle to their ready transmission for the purpose in view. It is to be noted, however, that the more ancient such remains are, they are likely to possess the greater interest and value. No indications have yet been noticed of a race in Canada corresponding to the Brachycephalic or square-headed mound builders of the Mississippi, and the discovery of such would furnish an addition of much importance to our materials for the primeval history of the Great Lake districts, embracing Canada West. Such remains, if found at all, are likely to be in a very fragile state, and will require much care in their removal. As it is not to be doubted that zealous coöperators in the object here referred to will be found among the members of the Institute, it may not be altogether useless to add a few hints relative to the collecting and preserving such ancient remains. It is not to be overlooked indeed, that the entire skeleton, as well as the skull, frequently presents features of interest and value, as evidence of peculiar distinctions of race, or as traces of habits and conditions of life, to those who have made such remains their special study. It is manifestly, however, only under very rare and peculiar circumstances that it can be expedient

or even desirable to have the entire skeleton preserved. But the decision of this point must be left to each explorer.

In the first place then, let it be noted that it is desirable to possess the whole of the bones of the head and face, including the lower jaw and the teeth. The slender and fragile bones of the nose are of special importance, and when remaining in their place should be carefully protected from injury. In all cases they are highly characteristic, and in none more so than in the races of American Indians, whose strongly-marked profiles derive their chief character from the prominence and peculiar form of the nose. It is also to be observed in the case of remains found under circumstances indicative of great antiquity, and consequently possessing peculiar value for the purposes in view, that though the bones may be wholly disjointed and even fractured, if the whole, or the greater number of the fragments be collected, and carefully packed so as to protect them from further injury, it may be quite possible to rejoin them, and so reconstruct the ancient cranium. The following incident derived from the experience of Dr. Morton, may suffice as an illustration of this:—

In the summer of 1842, a friend of his met in New York the well known American traveller, Mr. John S. Stevens, then recently returned from his second visit to Yucatan. The conversation turning upon Crania, Mr. Stevens regretted the destruction of all he had collected during his travels in consequence of their extreme brittleness. One skeleton he had hoped to save, but on unpacking it that morning, it was found so dilapidated that he had ordered it to be thrown away. A sight of it was immediately requested,—it was secured in its fragmentary and apparently hopeless condition, and forwarded to Dr. Morton. Its condition may be inferred from the fact that the entire skeleton was tied up in a small handkerchief, and carried from New York to Philadelphia in a hat-box. The next day, however, Dr. Morton was found with a gluepot beside him, industriously engaged in an effort to reconstruct the skull. A small piece of the occiput served as a basis, upon which he put together all the posterior portion of the cranium, showing it by characteristic marks to be that of an adult female. From the condition of another portion of the skeleton he derived evidence of a pathological fact of considerable moment, when viewed in relation to the antiquity indicated by the accompanying relics, and the peculiar circumstances under which this skeleton had been found; and the results of his observations, which have been published by Mr. Stevens in the narrative of his second visit to Yucatan, suffice to show how much interesting and valuable information may be deduced by the intelligent student of science from what, to the ordinary observer, would appear to be a mere handful of rubbish.

In Canada it is to be presumed that, in the great majority of cases, such remains will be discovered by chance, and their preservation from further injury in the hands of their original exhumers will be more a matter of accident than design. By and by, however, we may hope to create an intelligent interest in this department of scientific inquiry, and so find zealous explorers of the sepulchral chronicles of Canada, as well as of those of Egypt, Britain, or Central America. To such, a few additional hints may be of value.

Whether it be a grave-mound, ossuary, or cemetery, that is being explored, the ruder instruments of excavation, such as the pick-axe and spade, should be laid aside as soon as any portion of a skull or skeleton has been exposed. The whole must then be cleared from the surrounding earth by means of