## CRANIA.

For two or three years it has been my intention to embody in one of these reports the results of measurements, made on the skulls, in the museum. One deterrent reason was a fear that the quantity of material was not large enough, for, in the words of a distinguished anthropologist, "The first thing which is requisite for craniometrical study, is a sufficient number of specimens. \* \* \* \* The archæologist, therefore, should collect the most likely specimens he can find, and not take any he may lay hold of, and bring them to the laboratory with the question, Are these the skulls of so and so? \* \* \* \* \* Twenty skulls of the same sex, are sufficient in general to remove all questions of difficulty; but this number is necessary." Want of material, however, no longer constitutes a reason why such work should not be done, and I have been fortunate in securing for this purpose the professional services of those who were able to execute it much more satisfactorily than I could ever hope to perform it myself.

Where special attention is given to cranial examinations, many mechanical devices are employed for the purpose of obtaining exact results, and it may be in order to explain here that the only apparatus used for the following measurements consisted of tape-line and callipers. This not only rendered the labor exceedingly tedious, but, notwithstanding the great care exercised, failed probably to secure such absolute nicety as could be wished for in measurements of this

None but those who have attempted such work, can realise the number of difficulties that present themselves in securing accuracy. "Bernard de Palissy maintained that the human skull is the most irregular formed figure in nature, and gave expression to a sentiment in which all must agree who are commencing craniometrical researches. 'I have a desire,' he says, 'to measure the head, in order directly to know its dimensions, and it appears, to me, that the sauterelle, the rule and the compasses would be very proper instruments to employ for that purpose, but the fact is I can never be sure of my measurements.\*"

For the purpose of emphasising the character of the following results, it may be pardonable to state, that both of my assistants are graduates of Trinity University, Toronto, that one is now a practising physician in the city of Hamilton, and the other is demonstrator of anatomy in the Toronto Women's Medical College. I am glad to take this opportunity of thanking them both for the time and attention they have gratuitously bestowed on the work.

## CRANIAL MEASUREMENTS.

DEAR SIR:—In accordance with your request, and with the assistance of Dr. Letitia K. Meade, I have measured and examined certain of the Indian skulls in the Institute's collection, and herewith present the results of the work done.

The measurements have been made as carefully and accurately as limited time and scant apparatus would permit. On one or other of these grounds also, some calculations are wholly omitted.

At first we examined and gauged upwards of one hundred skulls, according to the rules laid down by Michele Centonze, but the accompanying results are mainly in agreement with the methods of Professr Paul Brooca, and Dr. Paul Topinard of Paris. Some assistance too, was procured from references made to Morton's Crania Americana.

<sup>\*</sup> Paul Topinard, "Anthropology" p. 223. London, Chapman and Hall, 1890.