

earliest appearance of true cyphers. For example, the poor Indian of Pope and North America marked ten in his rude hieroglyphics—often rude in more senses than one—by a vague outline of a man, like that chalked on London walls by the surviving boy-savage—a mere dot of a head, with a straight line for body, and two outstretched arms, ended by hands, standing on a pair of very open bow legs. The Roman numerals with which we are all so familiar, and which look so grand, learned and awful when we get them in the developed form of MDCCCXLVIII., start in reality from an equally humble and childish origin. They are mere picture-writing. When the noble Roman of remote antiquity wanted to mark the number one, he drew a single straight line or digit to represent the uplifted forefinger. In our modern type we print it I. For two he drew two digits, or II; for three, he wrote III; and four he represented, not by IV, which is a comparatively late modern innovation, but by the good old clock-dial symbol IIII. These, in fact, are nothing more than just the fingers of one hand. But how about five? Why should it be represented by the apparently meaningless symbol V? Simply because V is not V, but a rude hieroglyphic of one hand, the broad stroke standing for the four fingers united, while the narrow one stands for the extended thumb. V, in fact, is nothing more than a very degenerate pictorial symbol, like the  still used by printers in certain circumstances to call special attention to a particular paragraph. As for X, that is usually represented as equivalent to two such hands set side by side; but this interpretation I believe to be erroneous. I think it much more likely (on the Indian analogy) to stand for “one man up,” that is to

say, ten, with a people who counted by fingers alone, or, in other words, employed a decimal notation. If this hypothesis be true, X represents a double of the Indian man-figure, with outstretched arms and legs like a colossus, the hand having disappeared entirely by disuse, as often happens in the evolution of what are called cursive hieroglyphics.

The other Roman numerals, L, C, D and M, belong to a far later and more civilized period. I will not go fully here into the abstruse question of their origin and development, as learnedly traced by Canon Isaac Taylor in his interesting treatise; it will suffice, for most people, to mention briefly that they spring from discarded letters of the Greek alphabet, utilized by the practical Roman mind as numerals, and in two cases gradually twisted round by a false analogy into the semblance of C, the initial of *Centum*, and the delusive shape of M, the initial of *Mille*. This was distinctly clever of the primeval Roman; but he would probably have shrunk from so cruel a course had he foreseen the trouble that his procedure would give to subsequent archæologists, or the battles that would be waged by unborn nations over the origin and nature of his forgotten symbols.

Numerals like I, II, III, IIII, V, and X, scarcely rise above the lowest level of savage picture-writing. They recall the records of the noble red men of the West and the modern Esquimaux, who, when they wish to state a number in writing, do it, so to speak, as the logic-book says, “by simple enumeration,” putting down an exact picture of the persons or objects involved in the transaction. Thus, the well-known chronicle of the achievements of Wingemund, chief of the Leni Lenape Indians, who attacked the English settlements in