



## CHAPTER XLI.

### COMPUTATION OF TIME—ASTRONOMICAL AND GEOGRAPHICAL KNOWLEDGE.

**T**HE Indians do not reckon as we do, by days, but by nights. They say: "It is so many nights' travelling to such a place;" "I shall return home in so many nights," &c. Sometimes pointing to the heavens they say: "You will see me again when the sun stands there."

Their year is, like ours, divided into four parts: spring, summer, autumn, and winter. It begins with the spring, which, they say, is the youth of the year, the time when the spirits of man begin to revive, and the plants and flowers again put forth. These seasons are again subdivided into months or moons, each of which has a particular name, yet not the same among all the Indian tribes or nations; these denominations being generally suited to the climate under which they respectively live, and the advantages or benefits which they enjoy at the time. Thus the Lenape, while they inhabited the country bordering on the Atlantic, called the month which we call March, "the *shad* moon," because this fish at that time begins to pass from the sea into the fresh water rivers, where they lay their spawn; but as there is no such fish in the country into which they afterwards removed, they changed the name of that month, and called it "the running of the *sap*" or "the *sugar*-making month," because it is at that time that the sap of the maple tree, from which sugar is made, begins to run; April, they call "the *spring* month," May, the *planting* month, June, the *fawn* month, or the month in which the deer bring forth their young, or, again, the month in

which the hair of the deer changes to a reddish colour. They call July the *summer* month ; August, the month of *roasting ears*, that is to say, in which the ears of corn are fit to be roasted and eaten. September, they call the *autumnal* month, October, the gathering or *harvest* month ; December, the *hunting* month, it being the time when the stags have all dropped their antlers or horns. January is called the *mouse* or *squirrel* month, for now those animals come out of their holes, and lastly, they call February the *frog* month, because on a warm day the frogs then begin to croak.

Some nations call the month of January by a name which denotes "the sun's return to them," probably because in that month the days begin to lengthen again. As I have said before, they do not call all the months by the same name ; even the Monseys, a tribe of the Delawares, differ among themselves in the denominations which they give to them.

The Indians say that when the leaf of the white oak, which puts forth in the spring, is of the size of the ear of a mouse, it is time to plant corn ; they observe that now the whippoorwill has arrived, and is continually hovering over them, calling out his Indian name "*Wekolis*," in order to remind them of the planting time, as if he said to them "*Hackiheck !* go to planting corn !"

They calculate their ages by some remarkable event which has taken place within their remembrance, as, for instance, an uncommonly severe winter, a very deep snow, an extraordinary freshet, a general war, the building of a new town or city by the white people, &c. Thus I have heard old Indians say more than fifty years ago, that when their brother Miquon spoke to their forefathers, they were of such an age or size, they could catch butterflies, or hit a bird with the bow and arrow. I have heard others say (alluding to the hard winter of 1739-40) that they were born at that time, or that they were then so tall, could do certain particular things, or had already some gray hair on their heads. When they could not refer precisely to some of those remarkable epochs, they would say "so many winters after."

The geographical knowledge of the Indians is really astonishing. I do not mean the knowledge of maps, for they have nothing of the kind to aid them ; but their practical acquaintance

with the country that they inhabit. They can steer directly through the woods in cloudy weather as well as in sunshine to the place they wish to go to, at the distance of two hundred miles and more. When the white people express their astonishment, or enquire how they can hit a distant point with so much ease and exactness, they smile and answer: "How can we go wrong when we know where we are to go to?" There are many who conjecture that they regulate their course by certain signs or marks on the trees, as for instance, that those that have the thickest bark are exposed to the north, and other similar observations, but those who think so are mistaken. The fact is, that the Indians have an accurate knowledge of all the streams of consequence and the courses which they run; they can tell directly while travelling along a stream, whether large or small, into what larger stream it empties itself. They know how to take the advantage of dividing ridges, where the smaller streams have their heads, or from whence they take their source, and in travelling on the mountains, they have a full view of the country round, and can perceive the point to which their march is directed.

Their knowledge of astronomy is very limited. They have names for a few of the stars and take notice of their movements. The polar star points out to them by night the course which they are to take in the morning. They distinguish the phases of the moon by particular names; they say the "new moon," the "round moon" (when it is full), and when in its decline, they say it is "half round."

They ascribe earthquakes to the moving of the great tortoise, which bears the *Island* (Continent) on its back. They say he shakes himself or changes his position. They are at a loss how to account for a solar or lunar eclipse; some say the sun or moon is in a swoon, others that it is involved in a very thick cloud.

A constant application of the mind to observing the scenes and accidents which occur in the woods, together with an ardent desire to acquire an intimate knowledge of the various objects which surround them, gives them, in many respects, an advantage over the white people, which will appear from the following anecdote.

A white man had, at his camp in a dark night, shot an Indian dog, mistaking it for a wolf which had the night before entered the encampment and eaten up all the meat. The dog mortally wounded, having returned to the Indian camp at the distance of a mile, caused much grief and uneasiness to the owner, the more so as he suspected the act had been committed from malice towards the Indians. He was ordered to enquire into the matter, and the white man being brought before him, candidly confessed that he had killed the dog, believing it to be a wolf. The Indian asked him whether he could not discern the difference between the "steps" or trampling of a wolf and that of a dog, let the night be ever so dark? The white man answered in the negative, and said he believed no man alive could do that; on which the whole company burst out into laughter at the ignorance of the whites and their want of skill in so plain and common a matter, and the delinquent was freely forgiven.

