

and a few obscure markings, some of which resemble foot-prints, are all that have yet been observed in the deposits about the Bay of Fundy or in Prince Edward Island; yet we can hardly doubt that the land was covered with forests and that these were tenanted by abundant forms of animal life. These, too, must have been of the same general character as are found elsewhere in the deposits of this era. In the valley of the Connecticut River, where the beds are of precisely similar character to those of the Annapolis Valley and North Mountains, vast numbers of fossil foot-prints, mingled with a few bones, have been found, and clearly indicate both the abundance and the characteristics of the animal life of the time. It was at first supposed that the foot-prints, from their three-toed character, were those of birds, but later investigations have shown that they were rather those of reptiles or of animals combining the characteristics of both birds and reptiles. Some of the foot-prints are two feet in length, indicating animals of gigantic proportions, and they included both carnivorous and herbivorous forms. One, which has been christened *Brontozoum giganteum*, has been estimated to have had a height of fourteen feet. Many of these animals were bipeds like the birds, others were crocodilian in aspect and probably as ferocious, while still others must in height have resembled kangaroos. Frog-like animals or amphibians are also indicated, some of them as much as twelve or fifteen feet in height. Even the air had its reptiles, in the form of huge bat-like creatures (*Pterodactyls*). A little later in the cretaceous or chalk era, the life of the Reptilian Age began to dwindle and in its place came in the still more wonderful life of the Tertiary period, when our modern trees, such as oaks, maples, willows, beeches and palms in part supplanted the gymnosperms or conifers of earlier ages, and reptiles gave way to mammals, the aspect of both floras and faunas becoming more modern. It would be interesting to describe the latter, which embraced most of the modern groups, but, as in the case of the preceding reptiles, far exceeded their modern relatives in size; but these facts hardly belong to Acadian history. At least, though we may regard as probable their former existence here, we have no data from which to prove such belief. The lands during these long periods of time were for the most part above the

sea, and any fluviatile or lacustrine deposits which may have been formed have been swept away by later changes. During the period of the new Red Sandstone or Trias-Jura it is probable that the land stood a little lower than now, the isthmus of Chignecto was submerged and the currents of the Bay of Fundy swept freely into the Gulf of St. Lawrence, in whose waters were accumulating the materials which constitute the island of Prince Edward. Before the close of the era, as the result of a great crack in the same Bay of Fundy trough, there welled up the volcanic material of the North Mountains and Grand Manan, fixing the present topography of the coast. In the Cretaceous and Tertiary periods the land stood higher than now, and these epochs represent eras of extensive aerial denudation, possibly reducing the surface to the condition of a peneplain, above which only our higher hills projected. But even these changes do not complete the story, and the earth was not yet ready for its master, Man. Events of a character which we could never have anticipated and of which, even in the face of the most indisputable facts, we find it hard to believe the truth, were yet to take their part in the final moulding of the surface. Heretofore the climates of the world, even in high northern latitudes, had presented the conditions of perpetual summer. In our next chapter we shall introduce our readers to what has been appropriately called "The Great Geological Winter."

An Arithmetic Match.

When the busy week is almost over, we often spend the last half hour in some kind of mental diversion, and nothing delights the pupils more than an arithmetic match. Two of them choose alternately till the school is evenly divided and seated on opposite sides of the room. The leaders pass to the blackboard, and a simple example is given them. The first one that gets an answer, marks a star on the board; then the next two take their places, and another example is given. If any fail to get the correct answer, they pass to their seats, and two others attempt to solve the same example. The winning side is the one that gets ten stars first.—*The Advocate*.

The value of your teaching is not the information you put into the mind, but the interest you awaken.
G. Stanley Hall.