

that the development of life as read from the rocks is demonstrated to have been regular and onward, that the progress of life has been slow but upward, and that where transitional forms are wanting it is owing to our ignorance of the geological records.

Another instructive thing we gather from a consideration of the rocks of Selkirk is observed when we compare the life represented in them and that of the succeeding age. The Silurian system occupies a place in the second age (the rocks are grouped into five ages).

In the first where the rocks contain very few if any traces of life they are 30,000 feet thick. The second in which the Silurian rocks are found contains 53,000. The third age has only some 10,000 feet of solid rock and yet in this age the least in thickness, the most marvelous forms of life that ever appeared upon the globe are found. Here is where the wonderful reptiles flourished, the gigantic saurians of past time—animals the size of which surpasses anything we have in existence belonging to the same families. Flying reptiles, whose wings expanded twenty feet. Reptiles, whose steps, as found in the rocks, indicate a stride of five feet, as they wandered over the muddy flats of tidal shores. The Ichthyosaurus and plesiosaurus fought their battles in the seas of this age. Gigantic saurians nearly 100 feet in length, sported on the banks of nameless rivers. It was in very truth the "Age of Reptiles." Eight hundred species of cuttle-fish thronged the seas of this age. The sea, air and earth had each its species. Life was common and represented by huge forms. This flashes upon us in the smallest of the records in striking contrast to the comparatively limited representation in the largest. Unwearying research will require to be undergone through long periods of time before the great hiatus is filled up between the life of these two ages.

SCIENCE ATTRACTIVE.

In conclusion, I think enough has been said to show that a quarry is a place of more than ordinary interest when we endeavor to glean something from its stony layers which lie like so many leaves above each other, each, if properly read,

revealing some history regarding the early condition of our globe. The knowledge requisite for such intelligent examination is within the grasp of all. Reading, with some degree of thoughtful study, will attain it, and once secured, such knowledge will prove a lasting source of pleasure.

It was from amongst the rocks immediately overlying those which have been occupying our attention to-night that one of the brightest intellects of Scotland fought his way up from wielding a stonemason's hammer to become the author of some of the most eloquent descriptive books ever written. Thought and study did this for Hugh Miller, it will do the same for the members of this association. You are surrounded by a most inviting field for original research in the great Northwest, with its deep ravines cut hundreds of feet through deposits of the very systems which contain the remains of the gigantic reptiles already referred to. Very little is known of the prolific fields that surround us. Selkirk quarry is but one of innumerable outcrops along the Red River. I know of no more pleasant pastime that could be enjoyed by members of this association than that derived from a knowledge of some branch in the department of science. My object to-night in addressing you has been to show that much interest can be obtained from places where it might reasonably be thought there was none. If I have succeeded in interesting you with my remarks upon that quiet place on the banks of the Red River near Selkirk, and have in any way stirred up your minds to some activity so that you may snatch a few hours for contemplation and study from the many you are inclined to squander in an unhealthy atmosphere of mistaken pleasure, for I fear there are too many young men of to-day who scarcely know what reading is unless it be the time spent in a hasty perusal of a newspaper, or the reading of some idle tale poorly told. If, I repeat, I have placed a barrier to this wholesale useless expenditure of time by influencing your minds in the direction of study and research along the entrancing path of scientific study, I have been amply repaid for the time spent in the preparation of what I have said.