

for five years more. In 1846 the Copper region of Lake Superior occupied the entire attention of the Survey; and since that time an immense amount of country has been examined in various parts of the Province, the greater portion of which being entirely wild and unknown, it was found necessary to survey topographically. Besides the geology,—much of it of the very highest economic importance,—which has been followed out on both sides of the St. Lawrence, both above and below Montreal, in the Eastern Townships, and in the region around the confluence of the Ottawa; the courses of all the main rivers of Lake Huron on the one side of the “Height of Land,” and of the Ottawa on the other, have been traced and measured to their sources, the Lakes and principal features of the interior surveyed, and the elevation of every fall and rapid ascertained trigonometrically or by spirit level. Those surveys have since been mapped on a scale of an inch to a mile, with every particular noted thereon.

Moreover, a regular system of measurements has not been confined to the totally wild and unfrequented parts, but has been found absolutely necessary throughout nearly the whole of the settlements, in consequence of the numerous inaccuracies and omissions in the various township plans. Where a more accurate method could not be obtained, all the observations were connected by a registration of each step taken by the observer, the bearings from one point to another being taken by compass. And as an example of the amount of work accomplished by this means—Mr. Richardson (who has been employed as an explorer since 1845) in 1853 registered paces, in his note book, making a total distance during the season of upwards of 1000 miles. The results of this process have also been mapped on a scale of an inch to a mile, and have supplied, on many occasions, much material to fill up deficiencies, and correct discrepancies, on the old published maps.

The result of these investigations is already acknowledged to have been of incalculable benefit to science, as having most essentially thrown light, where there was much misapprehension before, on the whole of American Geology; and they have, moreover, beyond dispute, been productive of the most valuable information as regards the distribution of economic materials. While the position of such useful materials as *do* exist can be readily recognised by reference to the Geological map, in which the various formations are represented by different colors—those that *do not* exist, will be found wanting and, consequently, need not be looked for; such, for example, is the case with regard to Coal—a mineral not likely to be found among rocks recognised as belonging to the Silurian and Devonian epochs.