1855; a report of Mr. Henry Poole, dated January 31st, 1862; one by Mr. John Campbell, dated February 25th, of the same year, and a second, dated February, 1863, and accompanied with a geological section. These reports were published by the Provincial Government. In addition to these should be noticed the valuable reports of Prof. Benjamin Silliman, published in 1864; one on the Tangier district, and another on those of Waverley and Montague. To each of these is prefixed a sketch of the gold region, embodying a great amount of information with regard to its geology, mineralogy and economic importance. In the following introductory pages I shall make free use of the data furnished by the gentlemen just named, adding thereto such observations as I was able to make during my own short visit at a season of the year very unfavorable to examination. Farther researches will doubtless enable us to extend and, perhaps, to modify, in some particulars, the statements here made with regard to the geology of the region, which still presents many points requiring farther study. I must here call attention to a little work published within the last three months by Mr. John Lovell of this city, and entitled *A Practical Guide to the Gold Fields of Nova Scotia*, by Mr. Heatherington, now of Halifax. In it the author has brought together a great mass of information with regard to the history and present prospects of the gold region of Nova Scotia, together with important statistical tables, and an Appendix containing, among other things, the text of the present mining laws of Nova Scotia. He has also given copious extracts from the reports of Messrs. Poole and Campbell, together with a reduced copy of the geological section appended by the latter to his report of 1863. Mr. Heatherington commenced the publication, in January last, of a monthly journal called the *Mining Gazette*, and devoted to the mining interests of Nova Scotia.

Although the *Acadian Geology* of Dr. Dawson was published in 1855,* some years before the discovery of gold, there will be found in its fifteenth chapter a somewhat detailed description of the coast district of Nova Scotia, which has since become famous as a gold region. This consists of a zone of ancient stratified rocks lying exposed between the overlying strata of the Carboniferous system on the north-west and the ocean on the south-east, and having a breadth of from thirty to fifty miles in the wider portions, which to the north-east is reduced to not over eight miles. This belt of rocks extends along the Atlantic coast for a distance of about 250 miles, from Cape Sable on the west to Cape Canseau on the east, and has a superficies of about 6,000 square miles. Its surface is generally low, rising, however, in some places, to about 500 feet above the sea, and is in great part rocky and barren, the powerful denuding agencies to which, in past times, it has been exposed, having, over a large portion of the area, removed the alluvial deposits with which it was once covered and left the upturned and worn edges of the strata bare, or covered only with boulders of quartzite or granitic rocks. A large portion of this region is still an unexplored wilderness, and some of the most important gold districts are in localities which, until the discovery of the precious metal, were unreclaimed forests, so that it is in every way probable that farther explorations may detect many other districts not less important than those already known.

The rocks of this region consist chiefly of slates and quartzites; they are, however, cut in many places by intrusive granites, and in addition to these several small areas of gneissic rocks occur in different parts of the belt, but their true relations to the great mass of the strata are not yet clearly made out. Leaving these aside, the rocks which cover the principal part of the area under consideration, are, by Mr. Campbell, divided into a quartzite group, and a clay-slate group, the latter conformably overlying the quartzites, and the two constituting one gold-bearing series; the total measured thickness of these two divisions is, according to the same authority, nearly two miles; but the gold appears to be chiefly confined to the quartzite and the lower portions of the clay-slate division. The geological age of these rocks is uncertain; although comparatively little altered, they are without fossils, so far as yet known, and are very unlike the fossiliferous Upper Silurian and Devonian rocks met with in other parts of the Province; at the same time the high antiquity of the gold-bearing strata is shown by the fact that the Carboniferous system rests upon their upturned edges, and is partly formed from their ruins. In the present state of our knowledge it appears probable that they may represent a pa-

* A second and much enlarged edition of this work is now in press, and will shortly appear.