

unconformably on the Laurentian." The meaning of the first of the above quotations is rather vague, and it is certainly not apparent how the author, never having worked out or mapped the stratigraphy of these ancient formations, is in a position to make any affirmation on the subject. I hesitate to do so myself, notwithstanding that I have examined much more of the ground than the author has. Examination such as that referred to by the author, is wholly insufficient to warrant such a decided expression of opinion on his part, though it may enable him to understand and adopt or reject the conclusions of others. Even Sir W. Logan never affirmed the unconformity mentioned in the second quotation; and while he designated the Laurentian a System, he called the Huronian a *series*, and he says the Laurentian gneiss is *followed* by a slate conglomerate and nowhere does he say the Huronian series *rests unconformably on* the Laurentian. Dr. Robert Bell, who has studied these formations over a far wider geographical range than perhaps any other Geologist, does not think it is so; and I have myself never been able to find satisfactory evidence of it, though I have examined the shores from Bruce Mines at intervals to Thunder Bay, and have traversed and examined the country thence to Lake Winnipeg. The mere occurrence of red gneiss and granite pebbles in the Huronian conglomerates only proves the pre-existence somewhere of such rocks; but it is no proof that these pebbles were derived from the adjacent Laurentian rocks, which we now see at the surface. I am aware that Dr. T. S. Hunt has in 1858, and since, assumed the existence of this unconformity, but so far as I can make out, on equally hasty and partial examination of the region; thus, neither Principal Dawson's nor Dr. Hunt's conclusions on this matter can be said to be based on or accord with the stratigraphical observations of either Logan, Murray, Bell, or myself.

We find, pages 405-406, a very good general statement of various geological agencies, and included in it a tacit acceptance of that very important one—contemporaneous volcanic action—never recognized or alluded to in eastern Canada geology by Sir William, nor by the author, till pointed out by me, and we find it again referred to (page 414) as a "third suggestion," and applied without acknowledgment in the same tacit manner, Supplement to Acadian Geology, 1878.

On page 407 we read: "It is difficult—impossible would be more correct—without personal examination in the field to realize the actual character of the Quebec Group rocks, as exposed on the south side of the St. Lawrence, between Point Levis and Cape Rosier;" this should be between Cape Rosier and Vermont. And herein probably lies the explanation why I can realize these characters better than those who