

Allow me, gentlemen, to dwell a little longer on these rocks and especially on the protogin. The field appearance of the gabbro at the surface is that of a limestone owing to the decomposition of the anorthosite, and that of the protogin as a massive, greyish-green, coarsely crystallized rock, which on unaltered pieces shows by a microscopic examination to be composed of much translucent quartz with dark spots as enclosures, some feldspar and a good deal talc or chlorite. If the latter is a metamorphic product after biotite, the microscope might give us information about it, but I consider this of less importance than the question, "what was the cause, what the agency, that altered this rock to what it is now? Pressure? Well, that might have been the primary cause, and formed a favorable condition for the secondary, that is, for a chemical agency. Hot saline water in a highly eruptive locality suggests itself as the simplest explanation. Now again, the action of such waters on rocks of different kinds was, especially in the later Archaean times, undoubtedly not a rare occurrence; but a rare occurrence must have been the forming of a rock of exactly the same composition, and also rare the happening that all circumstances in altering and changing this rock were found to be the same, acted the same and formed the same results. Because we find this rock in only a few localities, and in this province, yes, I might say on this northern continent, so far as I am aware, only upon a few places in the Rainy river district, and there, following in almost a straight east-north-east line, the water-courses of the Seine Atti-Kokan, and appearing as far east as Ossinawee lake, not in a continuous belt, but in wide intervals, as isolated little knolls. It is accidentally that we have found this rock so far only upon the above-named places, because our travels through the country are principally done along the water-courses? Or offered our earth's crust at that time especially weak spots, or a weak line in the neighborhood, or along the shore of an Archaean sea, whose beach-pebbles and boulders are found cemented together now, by the lava and ashes, that it was possible to form a group of volcanoes whose ejectamenta are alike! Accepted this has been so, accepted further that the above-mentioned circumstances had prevailed, that hot mineral waters had acted upon the rock, then we have to accept also the theory that these waters not only changed this rock, but have been also the agency which has dissolved the minerals out of it, existing therein and infiltrated, and deposited them in the fissures of this rock. Wherever we