

bushes ; and these sandy deposits can be found for long distances north, probably to near the height of land. In deep cut sections the blue clay frequently appears in which, however, the marine organisms have not yet been found, and the mode of deposition can not therefore be distinctly affirmed. Marine shells have been found as far west as Bryson, on the Ottawa, and nodules like those of Green's Creek on Coulonge Lake 365 feet above sea level. It is thus clear that a very considerable part of the Ottawa basin has been submerged.

A very interesting point in connection with this question is the distribution of Laurentian boulders along the flanks of the mountain range which, traverses the eastern townships of Quebec, seventy to 100 miles south-east of the St. Lawrence River. Here on the slopes of the hill ranges which extend north-eastward from the Vermont boundary to Gaspé, scattered masses of gneiss and limestone from the Laurentian hills north of that river are found at elevations of 1000 to 1400 feet above the sea level. In the great valley between this ridge and the highland along the boundary of Northern Maine the drift has also been very extensive, clays and sand occurring at elevations of 800 to 1000 feet. This country has undoubtedly been submerged, and Hitchcock and others have recorded the presence of beaches and terraces along the mountains of Vermont and New Hampshire at elevations of 2000 to over 2500 feet. The whole question of submergence and elevation is of very great interest and the gradual accumulation of facts from many widely scattered points should, if properly interpreted, give us much reliable information when properly correlated. Unfortunately, however, the peculiarities of many minds prevent these facts from being regarded from the same stand point, so that while one sees in these phenomena the clearest evidence of submergence and sea beaches another sees only elevation and terminal moraines.

There is yet a large field of study along the Ottawa River and the many tributary streams for those who are interested in this branch of scientific investigation, and many points, a few years ago accessible only with difficulty and much expense, can now be readily reached by the various lines of railway lately constructed. There is no doubt therefore that fresh facts bearing on the question will rapidly accumulate and the vexed question of submergence or continental glaciation may be satisfactorily settled in the not far distant future.