from the Hudson river clays and refers then to *Vaccinum oxycoccus* abundant in the Connecticut clays.

Other observers have from time to time reported fragments of wood and lignite in clays in or about the river gorge but much of this material appears to be of more recent origin than the strictly glacial and Albany clays (see paper by Fitch in bibliography at end of this report).

Indian shell heaps occur along the banks of the Hudson at various places, composed largely of the shells of oysters and these have occasionally been seen in situations which led to the belief that they were in place in the sands overlying or interstratified with the clays. An examination of such a supposed case on the Croton delta showed Professor Grabau and myself that the shells were in a talus and derived from an old shell heap at the top of the bluff.

As for the remains of a reindeer found at Sing Sing (Ossining), I do not know the circumstances under which it was found; but its occurrence is consonant with the view of nonsubmergence of the lower Hudson valley.

So far as present evidence goes it appears safe to state that no strictly marine fossil has been found to be indigenous in the waters in which the clays were deposited from the mouth of the Hudson to the vicinity of Whitehall; and further that no estuarine species are known in the clays or sands. This does not mean that the clays were not deposited at sea level with a communication with salt water on the south or at the north but that they may have been laid down at or as far above sea level as their geologic environment may demand.

Landslips. The disastrous landslips characteristic of many clay areas, as for instance those of the St Lawrence valley described by the late George M. Dawson[1] and the recent catastrophe in Norway reported by Dr Hans Reusch,[2] are not likely to occur in the Hudson valley for the reason that over the great portion of the clay area these deposits lie on the dissected and glaciated rock terraces of the river. There is no great thick deposit of clay

[1]Abstract in Am. Geol. 23, p.103.

[2]Reusch, Hans, Norges Geologiske Undersögelse, no. 32, Aarbog for 1900, Kristiania. 1901; Nogle optegnelser frè Vaerdalen, p.1–32; Jordfaldet ved Morset i Stjordalen, p.32–44; The Landslip at Morset, p.226–28. Some notes regarding Vaerdal, p.218–26.