Another source of the variations in clay texture and a cause of sandy partings lies in the fine sand and dust blown out over bodies of water by the winds. Such subaqueous deposits it is believed are more widespread than has generally been supposed. The agency of the winds is readily recognized when the product transported is volcanic ash, but in the case of ordinary sands and rock dust it is less easy to determine the wind-borne origin of the material when laid down under water.[1]

The abundant evidence of the deflation of the sandy and gravelly plains left bare by the retreat of the ice in the eastern United States and the extent to which such sands are now being blown away from one tract and accumulated on another makes it highly probable that eolian deposits would be made in bodies of water and particularly in this latitude in the warm months of the year for during the winter snow and ice protect the sand from wind action. These sands in New England usually blow during the times of dry westerly winds, for the reason that easterly moist winds by the films of hygroscopic water which they permit to collect about the dust particles cause them to adhere and resist the action of the wind. These alternations of moist and dry conditions, of easterly and westerly winds, occur at the present time with singularly frequency owing to the movements of cyclones across the eastern United States. As noted by Clayton, rainy days with easterly winds recur about once a week and so do the following westerlies. Applying this possible cause of the interlamination of fine sandy layers with the glacial clays as they occur in the Upper Hudson valley, the clay layers would correspond to times of wet conditions when discharge from the ice would be most active; and the films of sand would correspond to longer or shorter episodes of strong westerly winds according to the thickness of the bands. In this view, the summer time of marked development of the interlamination should be distinguishable from the winter time of almost continuous clay deposi-

[1]For instances of wind-borne dust and fine sand showered down over water bodies, *see* Verbeck, Chevalier. Krakatoa and the appended charts; Reclus, E. New Physical Geography, vol. 2, The Ocean. N. Y. 1886. p.198–200; Darwin, Charles. Naturalist's Voyage Around the World. N. Y. 1887. p.5; Marsh, G. P. The Earth as Modified by Human Action. N. Y. 1874. p.545–608; Bather, F. A. Wind-worn Pebbles in the British Islands. Geol. Ass'n Proc. June, 1900. 16:396–420, with bibliography; Meunier, S. La géologie expérimentale. Paris. 1899. ch. 6. p.208–16.