

Both specimens are quite flat and the pressure having been apparently nearly equal in each, this has not been taken into account in deciding the identity, for although the form of the shield might have varied, the relative width of the bodies would not have been materially altered.

Future observation must determine how far these species may approximate through the respective varieties.

4. "*An attempt to discover some of the laws which govern Animal Torpidity and Hibernation*;" by Prof. PETER A. BROWNE.—Prof. B., after explaining a few technical terms, presented the Association with a table of the animals which become torpid so far as is yet known to Natural History. He then proceeded to examine the phenomena of this extraordinary state, under the following heads. 1st, the respiration of torpid animals; 2d, their circulation; 3d, their digestion; 4th, their secretions; 5th, their organs of relation; 6th, their organs of respiration.

Prof. Browne argued that there was a total extinction of respiration in perfect torpidity, and hence, the state was neither that of life nor death; but a third intermediate state.

5. *A Remark on the Geographical Distribution of Species*; by Prof. C. B. ADAMS.—In illustration of the principles of distribution of species as connected with climate, so ably enforced by Prof. Agassiz, it was stated that four hundred species of Mollusca were found in a small part of the island of Jamaica in a few weeks; that one-fourth of these were land shells, of which new species were found by the collector with every ten miles travel. As a remarkable example of the difference of *station* of different species, a small salt pond on the peninsula of Port Royal was described, in which *Cerithium atratum* occurred very abundantly from the margin to eighteen inches depth, where *C. literatum* commences and extends to three feet in depth. Although the two species approximate to contact at the zone of eighteen inches in depth, they do not intermingle.

6. *On the Taconic Rocks*; by Prof. C. B. ADAMS.—The north part of Addison county, Vermont, possesses peculiar advantages for the study of the so-called Taconic rocks, since here they pass from a highly metamorphic to a slightly metamorphic condition and have been much less disturbed. Some of the typical Taconic rocks disappear, or more probably pass gradually into rocks of the Lower Silurian system.

One of the most conspicuous of the rocks of this region, is a red sandrock, which Dr. Emmons regards as at or near the base of the New York system, but which overlies the Champlain Division, in the order of red sandrock, Hudson river shales, Utica slate, Trenton limestone, and La Motte limestone.

A section was exhibited of Snake mountain, in which these rocks appear by an uplift with their relative position unaltered.