Grand isle, directly opposite Cumberland head, and it would seem that these are the rocks referred to as transition beds by Professor Perkins.[1] From the study of the fauna White seems to be somewhat uncertain as to the precise horizon, and speaks of it as "very high Trenton or Utica".[2] Since the passage beds on Grand isle are demonstrably such, a comparison of their faunas with those of the Cumberland head rocks should settle the question of stratigraphic equivalency. But, if these be actually the passage beds, their thickness is apparently large, though the Cumberland head section is so greatly disturbed that little exact idea as to its thickness can be obtained. The lithologic character would seem to agree with such a reference.

Published data of precise character in regard to the thickness and nature of the Trenton toward the upper end of the lake, are not numerous. On the Vermont shore, across the lake from Port Henry, Brainard and Seeley give a measured thickness of 314 feet for the Trenton, the exposures being a continuation of the section on Crown point, on the New York side.[3] It is in this section that the Black River limestone attains its maximum thickness of 71 feet. White says of it that, on Crown point, above the Black River, is a continuous series of 100 feet of alternating, compact, sandy and shaly layers, all quite thin, containing the lower and middle Trenton fauna of the region.[4] It is not clear from their account, whether Brainard and Seeley include the Black River in their statement of the thickness of the Trenton or not. White states that there is a hiatus between the upper Trenton bed exposed and the Utica outcrops beyond, but makes no statement in respect to its amount. Nothing is therefore apparent as to the transition beds in the region. But, unless a fault intervenes, it would seem that they can not be of very considerable thickness.

At Larrabee point, opposite Fort Ticonderoga, White gives the Trenton a thickness of 110 feet, the section terminating in that formation, though Utica shale appears in place not far away.[5] The lithologic character of the formation is not touched on, and we

[1] *Op. cit.* p.114.
[2] *Op. cit.* p.460.
[3] Am. Mus. Nat. Hist. Bul. 8:313.
[4] Geol. Soc. Am. Bul. 10:457.
[5] *Op. cit.* p.456.