quite heavily bedded; in other places it becomes very shaly; this latter condition is specially noticeable near the middle of the formation. It is divided into an upper (150 feet) and a lower (30 feet) division on faunal grounds entirely.

Lower Oriskany (Dalmanites dentatus zone)

FAUNA OF THE LOWER ORISKANY

Vermipora serpuloides Hall (H) c1 Beachia suessana Hall (O) R-c Chonostrophia jervisensis Schuch. r-C2 Cyrtina rostrata Hall (O and On) r Dalmanella subcarinata Hall (H) R-C Leptaena rhomboidalis (Wilck.) (Trenton-Waverly) R-c Leptostrophia oriskania Clarke (O) R Meristella lata Hall (O) r Nucleospira elegans Hall (Niagara-H) c Orbiculoidea ampla Hall (O) r Orthothetes woolworthanus Hall(H) c Rensselaeria aequiradiata (Con.) (H) R R. subglobosa Weller c-C

Rhipidomella oblata Hall (H) r Spirifer murchisoni Castel. (O) r-c Stenochisma formosa Hall (H) r Strophonella? conradi Hall (H) r Uncinulus vellicatus Hall (H) R Actinopteria textilis (Hall) (H) R-C A. textilis arenaria (Hall) (O) R Diaphorostoma nearpassi (Weller) R D. ventricosum (Con.) (H and 0) R Loxonema jerseyense Weller ?-c Platyceras platystoma Hall (H) r P. ventricosum Con. (H and O) R Tentaculites acula Hall (H) r-c T. elongatus Hall (H and O) r Dalmanites dentatus Barr. R-C D. dolphi Clarke R^s Homalonotus vanuxemi Hall (H) c

Out of the above fauna of 30 species, 6 have so far been found only in these beds, 4 occur in both Helderbergian and Oriskanian, 13 are Helderbergian and 7 are Oriskanian species. Omitting from the consideration all that are very rare (R), there are present 11 Helderbergian and 5 Oriskanian species, which vary in number

¹R=very rare; r=rare; c=common; C=very common. H=Helderbergian; O=Oriskanian; On=Onondagan species. ?=species doubtful. When no horizon is given, the species has been found in the beds of this region only (i. e. northwestern New Jersey and southern New York).

²Schuchert notes the occurrence of the species in the Becraft of the Port Jervis region. Am. Geol. 27:250.

^{*}Described from these beds but not seen by me.