But this close similarity may be due to a possible derivation of both from S. petilus of the Waldron area.<sup>1,2</sup>

## S. cyclopterus Hall

The young of this species is quite similar to S. vanuxemi in external form and markings. A young specimen of S. cyclopterus from the Coeymans gives the following measurements:

Length	Вкелотн	Proportion of Length to Breadth	UMBER OF PLI- CATIONS ON EACH SIDE OF SINUS	
2.5	т 4·5	ı.8	<b>2</b> 4	Brachial valve
2.3	4.3		3	· · · · · · · · · · · · · · · · · · ·
5	9	1.8	4	Pedicle valve

In the above brachial valve, the central plication or fold is very slightly larger than those on each side of it; and the plications are but slightly wider than the furrows between them. No flattening of the fold was noticeable. The sinus of the pedicle valve near the umbo is but slightly wider than the furrows on each side, while at the front of the shell it is about twice as wide. All this is also true of S. vanuxemi. This young specimen also agrees with S. vanuxemi in the number of plications but exceeds it in the proportion of length to breadth of the valves. With the exception of this last fact, the similarity between the two species is almost perfect and suggests a possible derivation.<sup>3</sup>

In many of the New Scotland beds occur frequently only the internal molds of S. cyclopterus. They bear a general resemblance to S. murchisoni but the cast of the musculature of the pedicle valve of the former is narrower and the sinus in it is not as wide as in the latter species. The internal mold of the plications is also usually less pronounced in the former. The surface of the mold on both sides of the muscular impression is papillose in both species, indicating a punctate surface on the corresponding parts of the shell.

<sup>&</sup>lt;sup>1</sup>Grabau. N. Y. State Pal. An. Rep't 1902, p.1046.

<sup>&</sup>lt;sup>2</sup>Clarke & Beecher. N. Y. State Mus. Mem. 1. 1889. p.75.

<sup>\*</sup>Stuart Weller [Geol. Sur. N. J. 3:287] calls attention to the likelihood of the derivation of S. cyclopterus from S. vanuxemi.