The close similarity in the structure of the apical portion of the conchs of Proterovaginoceras belemnitiforme and Nanno aulema has been recognized by Clarke, Holm and Hyatt. We have found a like nepionic siphuncle in Proterocameroceras brainerdi. Proterovaginoceras belemnitiforme and Proterocameroceras brainerdi have further in common the strong development of the peculiar organ which we have termed the endosiphocoleon, leaving as structural differences only the different length of the septal necks or funnels and the presence of the endosipholining in the latter. The phylogenetic relationship or common origin of the Proterovaginoceras-Vaginoceras series, the Proterocameroceras-Cameroceras and the Nanno series is therefore not to be doubted. Of these again the Vaginoceras series has retained the most primitive characters, as is apparent by the longer septal necks. A Vaginoceras-like form is therefore with great probability to be considered as the common radicle of the entire group. This form, which in the appended diagram we have designated as " Protovaginoceras," would have to be looked for in stages still preceding the late Beekmantown.

Our view of the relation of the species of Vaginoceras, Cameroceras, Nanno and Piloceras[1] attained here is expressed in briefer form in the following table.

	VAGINOCERAS SERIES	CAMEROCERAS-ENDOCERAS SERIES	NANNO SERIES	PILOCERAS SERIES
Typical or mature development	Vaginoceras multitubulatum (Vaginoceras wahlenbergi) (Vaginoceras vaginatum) etc.	Cameroceras trentonense, Cameroceras proteiforme	? (Nanno) fistula ? (Nanno) pygmaea	Piloceras
Proteroforms	Proterovaginoceras belemnitiforme	Proterocameroceras brainerdi	Nanno aulema	(Proteropiloceras)
Protoform	Protovaginoceras			

[1] *See* chapter 8, p.329.