

Note on the Carotids of Rhea americana. By FRANKLEN P. EVANS,
Esq., University College, Bristol.

In dissecting a young but almost full-grown specimen of *Rhea americana* I find that the right carotid is evidently present, though it is much smaller (about $\frac{1}{10}$ inch diam.) than the left. Its position for some distance past its origin corresponds to that of the left carotid; but subsequently, instead of converging to meet the latter, which runs along the hypapophysial canal, it continues onwards by the side of the right pneumogastric nerve and jugular vein. As the late Mr. A. H. Garrod, in his paper on the carotid arteries of birds (P. Z. S. 1873, p. 470), states that normally the left carotid alone is present in this species, it is possible that this difference is due to age; if so, it is interesting to find that a structure, the absence of which in the adult bird is regarded by Mr. Garrod as of sub-family importance, is originally present in the young bird, persisting even until close upon sexual maturity. Perhaps this may explain the conflicting statements of Prof. Owen with regard to the anatomy of *Apteryx* as quoted by Mr. Garrod.

On the Origin of Alternation of Generations in Hydro-Medusæ.
By W. K. BROOKS.

It is hardly possible that the form of development which we now find in most of the hydro-medusæ can bear any close resemblance to their primitive life-history; and there are many reasons for believing that alternation of generations has gradually arisen through the modification of "metamorphosis."

In *Cunina* we seem to have the ancestral form of development, a direct metamorphosis without alternation. The interesting and remarkable life-history of *Cunina* was first described by Prof. John McCrady, who found inside the bell of a hydro-medusa, *Turritopsis*, at Charleston, S. C., a number of hydra-like larvæ attached by short tentacles to the subumbrella, and furnished with a very long and flexible proboscis, with the oral opening at its tip. These larvæ are parasitic; and they obtain their food by inserting the proboscis into the mouth of the *Turritopsis*, and thus sucking from its stomach the food which it contains. In his first paper upon the subject Prof. McCrady stated his belief that these larvæ were the young of the *Turritopsis*, which carries its young inside its umbrella and nourishes them with partially digested food from its own stomach. Although McCrady soon corrected this error, and showed that they are not the young of *Turritopsis*, but the larvæ of *Cunina*, Romanes, in his recent work on 'Animal Intelligence,' has quoted McCrady's error without his correction, and refers to this instance of parasitism as a case of maternal care for the young among the Cœlenterata.

During the past summer both *Turritopsis* and *Cunina* were extremely abundant at Beaufort, N. C., throughout July and August, and I was fortunately able to trace the life history of each of them.



Evans, Franklen P. 1883. "Note on the carotids of *Rhea americana*." *The Annals and magazine of natural history; zoology, botany, and geology* 11, 458–458.
<https://doi.org/10.1080/00222938309459183>.

View This Item Online: <https://www.biodiversitylibrary.org/item/92742>

DOI: <https://doi.org/10.1080/00222938309459183>

Permalink: <https://www.biodiversitylibrary.org/partpdf/67935>

Holding Institution

Missouri Botanical Garden, Peter H. Raven Library

Sponsored by

Missouri Botanical Garden

Copyright & Reuse

Copyright Status: Public domain. The BHL considers that this work is no longer under copyright protection.

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.