

DISCOVERY OF A JUNIOR SYNONYM FOR THE LATE CRETACEOUS GENUS *CONIASAURUS* (REPTILIA, SQUAMATA)

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*Coniasaurus* is a small, semi-aquatic reptile found in Cretaceous deposits of England (Owen, 1850; Caldwell and Cooper, 1999), Germany (Diedrich, 1997), and North America (Bell et al., 1982; VonLoh and Bell, 1998). While investigating the literature on the genus, I noticed a discrepancy in the spelling of the genus between Owen's 1850 paper and his 1851 paper. It is spelled "*Coniasaurus*" in the 1850 paper and "*Coniosaurus*" with an "o" in the 1851 paper.

The first published use of the generic name was Owen's chapter in an 1850 volume entitled "The Geology and Fossils of the Tertiary and Cretaceous Formations of Sussex," (Fig. 1A) credited to Frederick Dixon, and compiled by Owen. In his foreword, Owen indicates that Dixon passed away before bringing his work to completion, and that Owen published the work posthumously in Dixon's name. Owen wrote the

chapter on Reptilia in the volume. His chapter includes the description and creation of the genus *Coniasaurus*, spelled with an "a."

Owen's 1851 paper (Fig. 1B) was the first of a series of monographs published on the fossil Reptilia from the Cretaceous, and apparently Owen recycled the chapter out of the Dixon volume as the first installment of the new series. The 1851 paper is identical to the original 1850 paper with two exceptions: (1) the spelling of the generic name, and (2) the figure numbers, which are correct in each volume respectively.

The spelling of the generic name in Owen's 1851 paper was clearly not a typesetter's error, because the name is spelled consistently throughout the volume. Whereas the papers are identical, word for word, and although Owen gives the English translation of the generic and specific names in both papers ("the thick-toothed Lizard of the

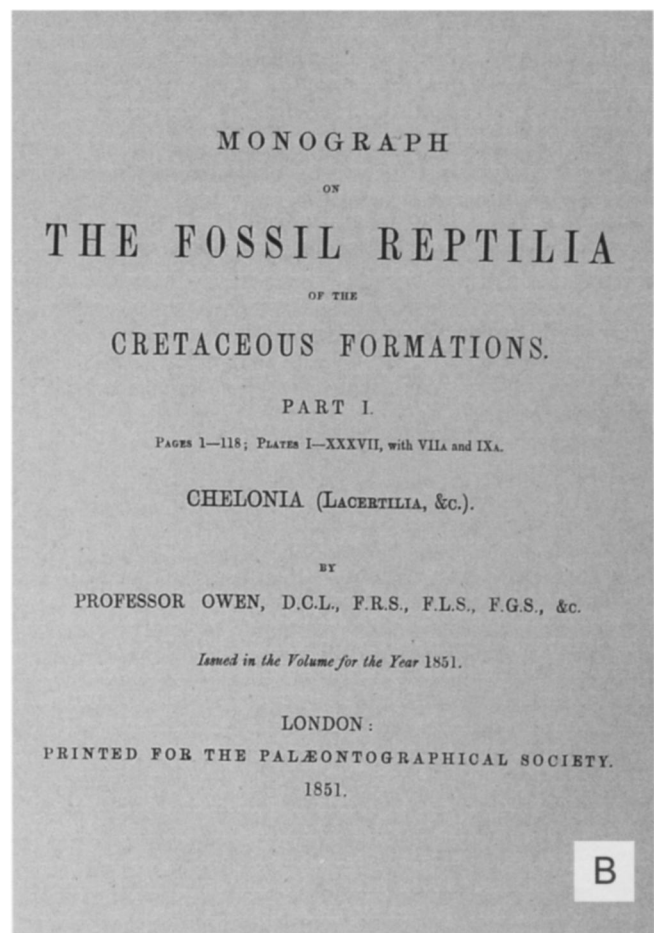
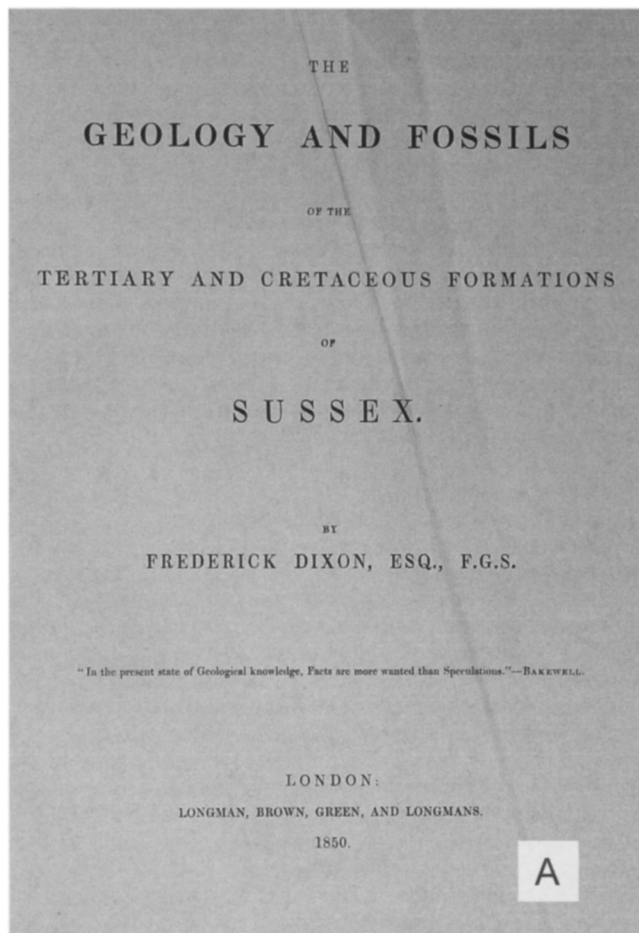


FIGURE 1. Title pages of the 1850 (A) and 1851 (B) publications by Owen wherein he establishes the genera *Coniasaurus* and *Coniosaurus*, respectively.

Chalk Formations”) he only gives the Greek roots for the genus in the second publication as a footnote (konis, meaning chalk, plaster or dust; and sauros, meaning lizard). When connecting two Greek roots, the connecting vowel is almost always an “o” (Brown, 1956); thus, it seems likely that Owen was trying to correct the earlier spelling from the “a” to the more common “o.”

However, according to Article 32 of the International Code of Zoological Nomenclature (International Commission on Zoological Nomenclature, 1999), use of an inappropriate connecting vowel is not considered an inadvertent error in spelling. Since it cannot be emended, the original spelling must stand. Therefore, the 1851 publication was an unjustified emendation (Article 33), and in the process created a new name, “*Coniosaurus*,” giving the exact diagnosis, and specifying and figuring the same type specimen, for the taxon named just a year before. Accordingly, *Coniosaurus* is a junior objective synonym of *Coniasaurus*.

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