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DESCRIPTION OF A SPECIES OF *CARDIOCERAS* FROM THE CROWS NEST COAL FIELDS.

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The genus *Cardioceras* of Neumayr and Uhlig consists of a few species of Ammonites with compressed involute whorls, a crenulated keel, and acute radiating ribs,—that were formerly referred to the Amalthei of Von Buch, and that have hitherto been regarded as peculiar to the Callovien and Oxfordien subdivisions of the European Upper Jurassic. It was first described in the twenty-seventh volume of the "Palæontographica," published at Cassel in 1881.

In the second volume of the "Handbuch der Palæontologie" (1881-85), Zittel regards *Cardioceras* as closely related to the Liassic genus *Amaltheus*, but Hyatt, in his latest and much more recent classification of the Ammonites in Eastman's translation of Zittel's Text-book of Palæontology (1900), places these two genera in different families, and says that "the young are very distinct."

One of the commonest and best known species of *Cardioceras* is the fossil originally described by James Sowerby in 1813 (Mineral Conchology, vol. 1.) as *Ammonites cordatus*, which is abundant in the Oxfordien of England, France, Switzerland, and Russia. Of this species there are several good specimens in the Museum of the Geological Survey, that were collected by the writer in 1859 or 1860, from the Oxford Clay and Coral Rag near Oxford, England.

The genus has not previously been recognized in rocks of any age on the North American continent, but the *Ammonites cordi-*