

THE OTTAWA NATURALIST.

VOL. XX.

OTTAWA, AUGUST, 1906.

No. 5

THE SPECIES OF BOTRYOCRINUS.

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Twelve years have passed since the first publication of a statement that *Botryocrinus* occurs in America 'Crin. Gotland,' *Svensk. Vet.-Akad. Handl.*, XXV. No. 2, pp. 103-105; 1893. Although two of the determinations there made have been accepted by such well-known palaeontologists as Dr. J. F. Whiteaves and Dr. Stuart Weller, the facts appear to be still unrecognized by some American writers on fossil crinoids. It may therefore be useful to consider the generic position and the specific independence of the alleged American forms more fully than heretofore.

Comparison of the American species, rightly or wrongly referred to *Botryocrinus*, with the species found in Europe and Australia is rendered difficult by the fact that the diagnoses of the latter were based mainly on the characters of the arm-structure and partly on those of the stem-structure, whereas the former species are represented only by dorsal cups. It has, therefore, been necessary to re-study the dorsal cups of the European and Australian species and to prepare diagnoses founded on those elements alone. While the European and Australian species are not readily distinguished *inter se* upon these grounds, the dorsal cups of the American species fortunately present more points of difference.

My thanks are due to Dr. Whiteaves for kindly lending me the unique specimen of his *Homocrinus crassus*, of which a plaster cast is now preserved in the British Museum; also to Mr. F. Chapman of Melbourne for sending a wax squeeze of his *Botryocrinus longibrachiatus* to the same museum. A re-examination of this and other material contained in the British Museum has