

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON.

ON *CARCHARODON MORTONI* GIBBES.*

BY F. A. LUCAS.

In his Monograph of the Fossil Squalidae of the United States Gibbes assigns the name *Carcharodon mortoni* to two incomplete teeth, stating that with the exception of a single specimen in the cabinet of F. S. Holmes, of Charleston, he had met with none elsewhere. The species was originally described in the Proceedings of the Academy of Natural Sciences of Philadelphia for 1847, page 266, the descriptions being repeated in the Journal of the Academy for 1848, page 146, and one of the specimens shown in figure 45, plate xxi.

The essential part of the description consists in the statements that "both the outer and inner surfaces are convex and prominent, the latter trebly so," and "the root is immensely thick, an inch and a half, and constitutes more than half the bulk of the tooth." The figure shows the tooth to have been unusually thick and swollen for a tooth of *Carcharodon*, and that the root was irregular in shape.

A. Smith Woodward, in his Catalogue of Fossil Fishes in the British Museum, places *Carcharodon mortoni*, with several other reputed species of the genus, in the list of those "* * * recognized upon the evidence of detached teeth, though it is not improbable that some of the names are synonyms * * *."

* Read before the Biological Society of Washington, Feb. 20, 1892.

Among the specimens of *Carcharodon* in the United States National Museum is a very perfect and beautiful tooth, collected by Ira Sayles in the vicinity of Richmond, Va., which agrees very well with Gibbes' description and figure of *C. mortoni*. Although very thick and massive, the specimen presents a curiously distorted and bulged appearance, precisely as if it had been spread out by pressure on the apex of the tooth. On the anterior face are evidences of injury, and from this has undoubtedly resulted the unusual shape of the tooth. The specimen figured by Gibbes has the same unnatural, swollen look as the tooth in the United States National Museum, and there can be no doubt but that it too is a mere abnormality, possibly caused by a similar accident to the tooth while young.

The extreme rarity of examples of *Carcharodon mortoni* is in accord with the supposition that they are merely abnormal teeth, and as lateral cusps are lacking in the few specimens recorded, *Carcharodon mortoni* Gibbes, should stand as a synonym of *Carcharodon megalodon* Agassiz.