

EXPLANATION OF PLATES, PART II.

PLATE XXIII.

Kansas Cretaceous Sea. (Page 234.)

PLATE XXIV.

Figs. 1, 1a, 1b.—*Lamna sulcata* Geinitz, after Leidy, natural size.

Figs. 2, 2a.—*Scapanorhynchus raphiodon (texana)* Agassiz, natural size, after Leidy.

Fig. 3.—*Leptostyrax bicuspisidatus* Willist., from the side, natural size.

Fig. 6.—*Scylliorhinus (Lamna?) gracilis* Willist., enlarged.

Figs. 7, 8.—*Scylliorhinus planidens* Willist., enlarged.

Fig. 5.—*Scylliorhinus rugosus* Willist., enlarged.

Figs. 9, 10.—Fragments of undetermined teeth from Kiowa shales.

Fig. 11.—*Cælodus stantoni* Willist., imperfect right splenial dentition, natural size.

Fig. 12.—*Cælodus brownii* Cope, imperfect left splenial dentition, natural size.

Figs. 13, 13a.—Amphibian atlas from Laramie Cretaceous.

Fig. 14.—Undetermined shark tooth (*Corax?*) from Benton of Colorado, enlarged.

Figs. 15, 15a.—*Leptostyrax bicuspisidatus* Willist., natural size.

Middle figure of plate—Selachian verbebra (*Corax?*) from Niobrara Cretaceous.

PLATE XXV.

Ptychodus mortoni Mantell, natural size.

PLATE XXVI.

Fig. 1.—*Ptychodus mortoni* Mantell, part of dentition of upper jaw, as preserved in the matrix, four-sevenths natural size.

Figs. 2, 4.—*Scapanorhynchus raphiodon* Agassiz, natural size.

Fig. 3.—*Lamna appendiculata* Agassiz, natural size.

Fig. 5.—*Isurus mantelli* Agassiz, natural size.

Fig. 6.—*Cælodus stantoni* Willist., crowns of two teeth from internal row, lower jaw, much enlarged.

Fig. 7.—*Leptostyrax bicuspisidatus* Willist., enlarged.

PLATE XXVII.

Fig. 1.—*Ptychodus mortoni*, end of superior dentition, continuous with left end of fig. 1, plate XXVI, but less reduced.

Fig. 2.—*Ptychodus mortoni*, a transverse series of teeth, arranged more loosely, from near the right extremity of fig. 1, plate XXVI, about two-thirds natural size; the upper series belong one at each end of the lower series.

PLATE XXVIII.

Ptychodus martini Willist., three-fourths natural size; the teeth were discovered disassociated.

PLATE XXIX.

Figs. 1, 2, 3.—*Ptychodus*, sp. indet.

Fig. 4.—*Ptychodus occidentalis* Leidy, natural size.

Figs. 5-8.—*Ptychodus anomynus* Willist., natural size.

Fig. 9.—*Ptychodus polygyrus* Buckl., a little enlarged.

Figs. 10-15.—*Ptychodus whipplei* Marcou, nearly natural size.

Figs. 16-18, 20-22, 24.—*Ptychodus anomynus* Willist., nearly natural size.

Figs. 19, 23, 25, 26, 27.—*Ptychodus*, spp.

PLATE XXX.

Figs. 1-3.—Undetermined lamnids from Kiowa shales, Lower Cretaceous, enlarged one-half.

Fig. 4.—? *Mesodon abrasus* Cragin, enlarged one-half.

Figs. 5, 6.—*Lamna*, sp., from Kiowa shales, enlarged one-half.

Figs. 7, 8.—*Corax curvatus* Willist., from without and within, enlarged nearly two diameters.

Figs. 9-11.—? *Ptychodus janewayii* Cope, enlarged.

Fig. 12.—*Lamna*, sp., enlarged nearly two diameters. Kiowa shales.

Fig. 14.—*Ptychodus polygyrus*, from the side, natural size (the same tooth figured on plate XXIX, fig. 9).

Fig. 13.—*Ptychodus occidentalis*, enlarged nearly two diameters.

PLATE XXXI.

Figs. 1-40.—*Corax falcatus* Agassiz, about nine-tenths natural size; isolated teeth from many individuals.

Figs. 41-46, 50-52.—*Isurus mantelli* Agassiz, nearly natural size.

Figs. 47-49.—*Lamna appendiculata* Roemer, nearly natural size.

Fig. 53.—*Ptychodus*, sp., enlarged one-fourth.

PLATE XXXII.

Figs. 1-11.—*Corax falcatus* Agassiz, from a single individual.

Figs. 2-21.—*Isurus mantelli*, from a single individual.

Figs. 3-3c.—*Lamna appendiculata*.

Figs. 4, 5.—*Scapanorhynchus rhabphiodon* Agassiz.

Figs. 6, 7.—*Isurus mantelli*.

All six-sevenths natural size.

PLATE XXXIII.

Skull of *Xiphactinus audax* Leidy, one-third natural size: *pmx*, premaxilla; *mx*, maxilla; *den*, dentary; *dar*, dermarticlar; *eth*, ethmoid; *fr*, frontal; *pa*, parietal; *soc*, supraoccipital; *epot*, epiotic; *ptot*, pterotic; *pa?*, parietal?; *prf*, prefrontal; *pfr*, postfrontal; *pal*, palatine; *sor*, suborbital; *suor*, supraorbital; *sc*, sclerotic ring; *ps*, parasphenoid; *su*, jugal?; *hm*, hyomandibular; *pop*, preopercular; *op*, opercular; *sop*, subopercular; *q*, quadrate; *1, 2*, vertebræ; *n, n, n*, neural spines.

PLATE XXXIV.

Left mandible of *Xiphactinus audax* Leidy, external view, one-half natural size: *den*, dentary; *dar*, dermarticlar.

PLATE XXXV.

Left mandible of *Xiphactinus audax* Leidy, internal view, one-half natural size: *den*, dentary; *dar*, dermarticlar; *auar*, autarticlar; *sp*, supposed splenial.

PLATE XXXVI.

Xiphactinus audax Leidy, one-half natural size.

Fig. 1.—Sclerotic ring.

Fig. 2.—Premaxilla.

Fig. 3.—Maxilla.

PLATES XXXVII, XXXVIII, XXXIX.

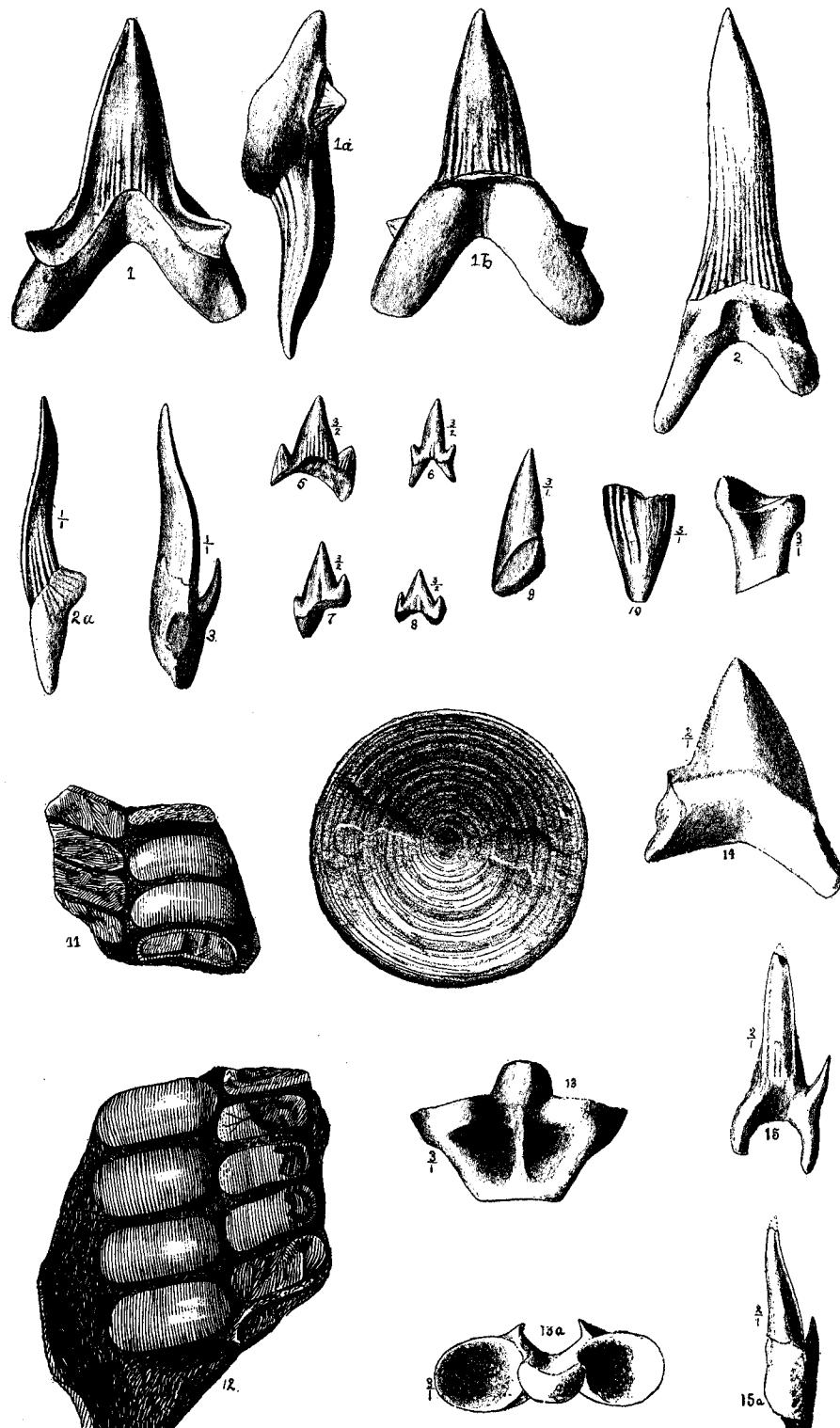
Maxillæ, premaxillæ and mandibles of *Xiphactinus audax* Leidy, one-fourth natural size, showing the great individual variation in these parts.

PLATE XL.

No. 155. Maxilla, premaxilla and mandible of *Xiphactinus brachygnathus* Stewart.

PLATE XLI.

Superior maxillary condyles of *Xiphactinus audax* Leidy, one-third natural size, showing variation in the same.

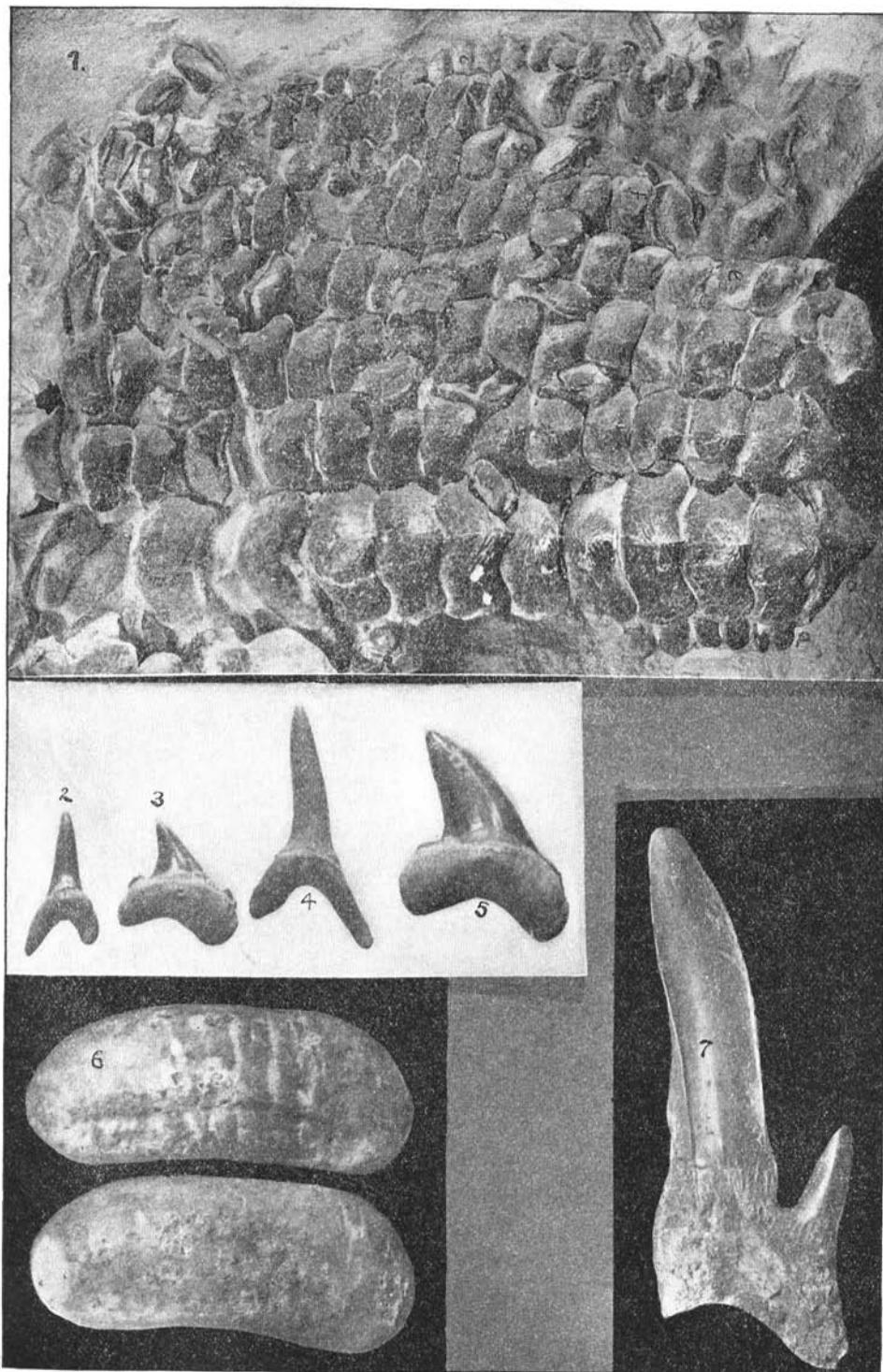


Syd Penrudd del.

LAMNA, 1.*SCAPANORHYNCHUS*, 2.
SCYLLIORHINUS, 5-8.*LEPTOSTYRAX*, 3, 15.
CÆLODUS, 11, 12.



PTYCHODUS MORTONI.



PTYCHODUS, 1.

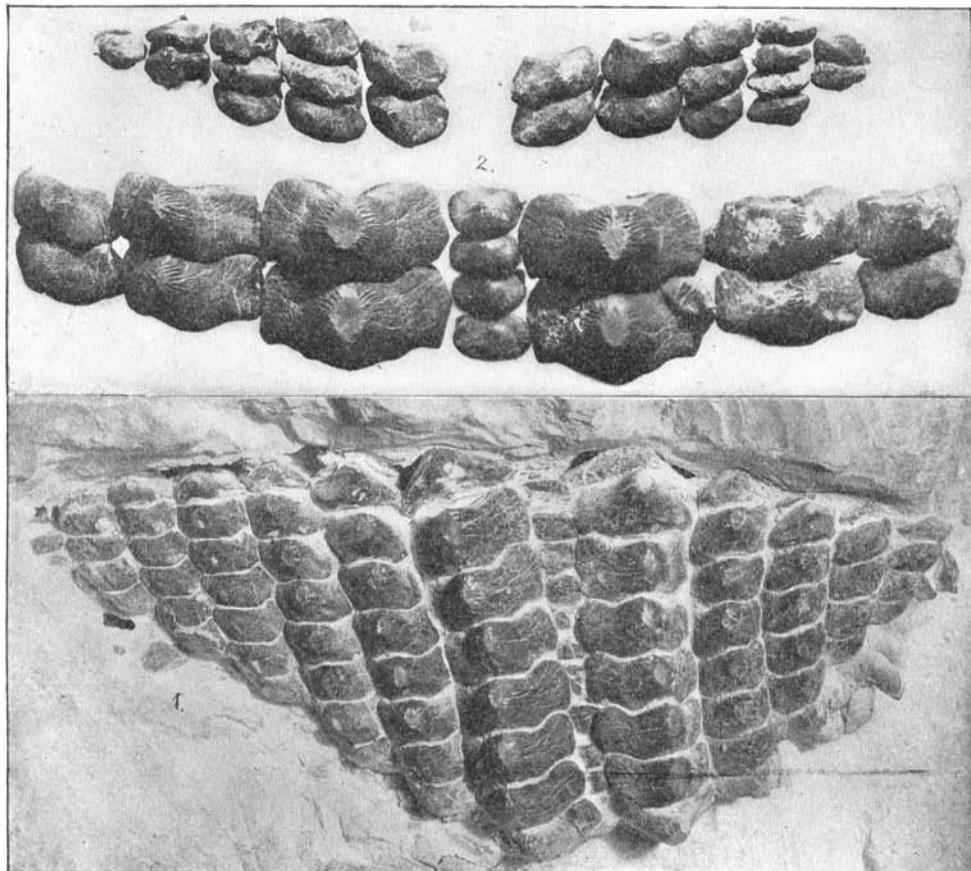
SCAPANORHYNCHUS, 2, 4.

LAMNA, 3.

ISURUS, 5.

CŒLODUS, 6.

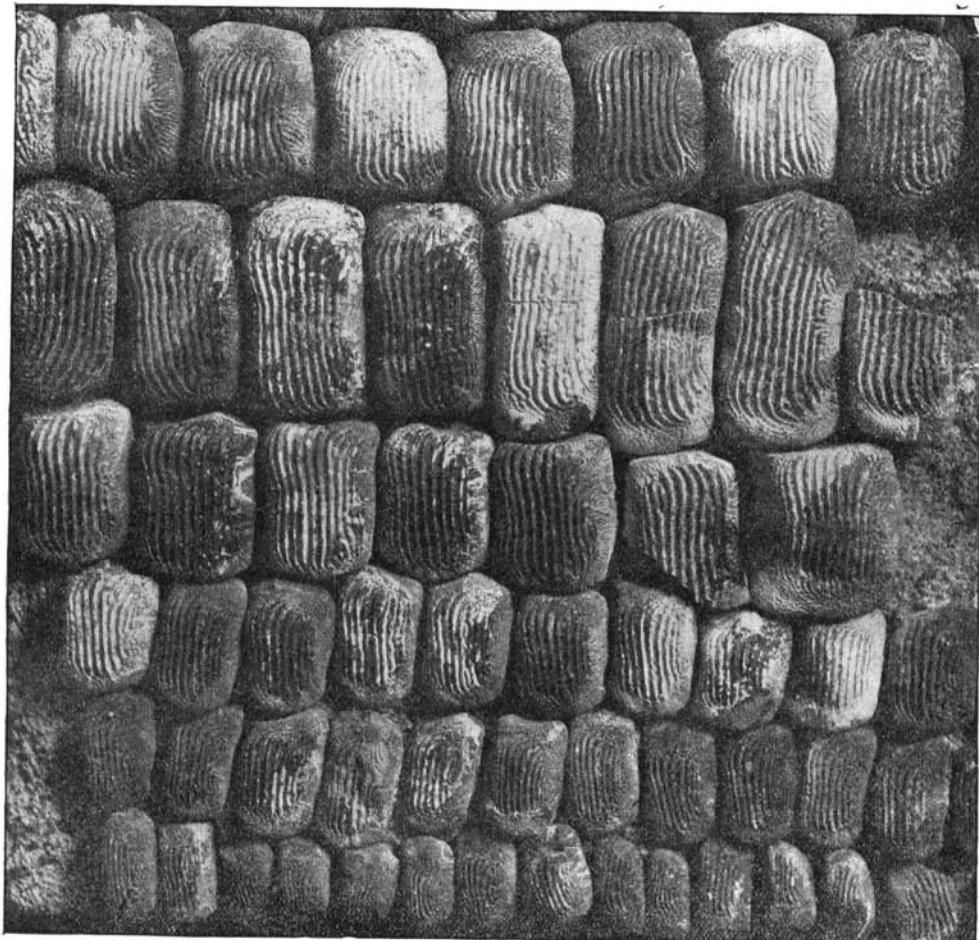
LEPTOSTYRAX, 7.



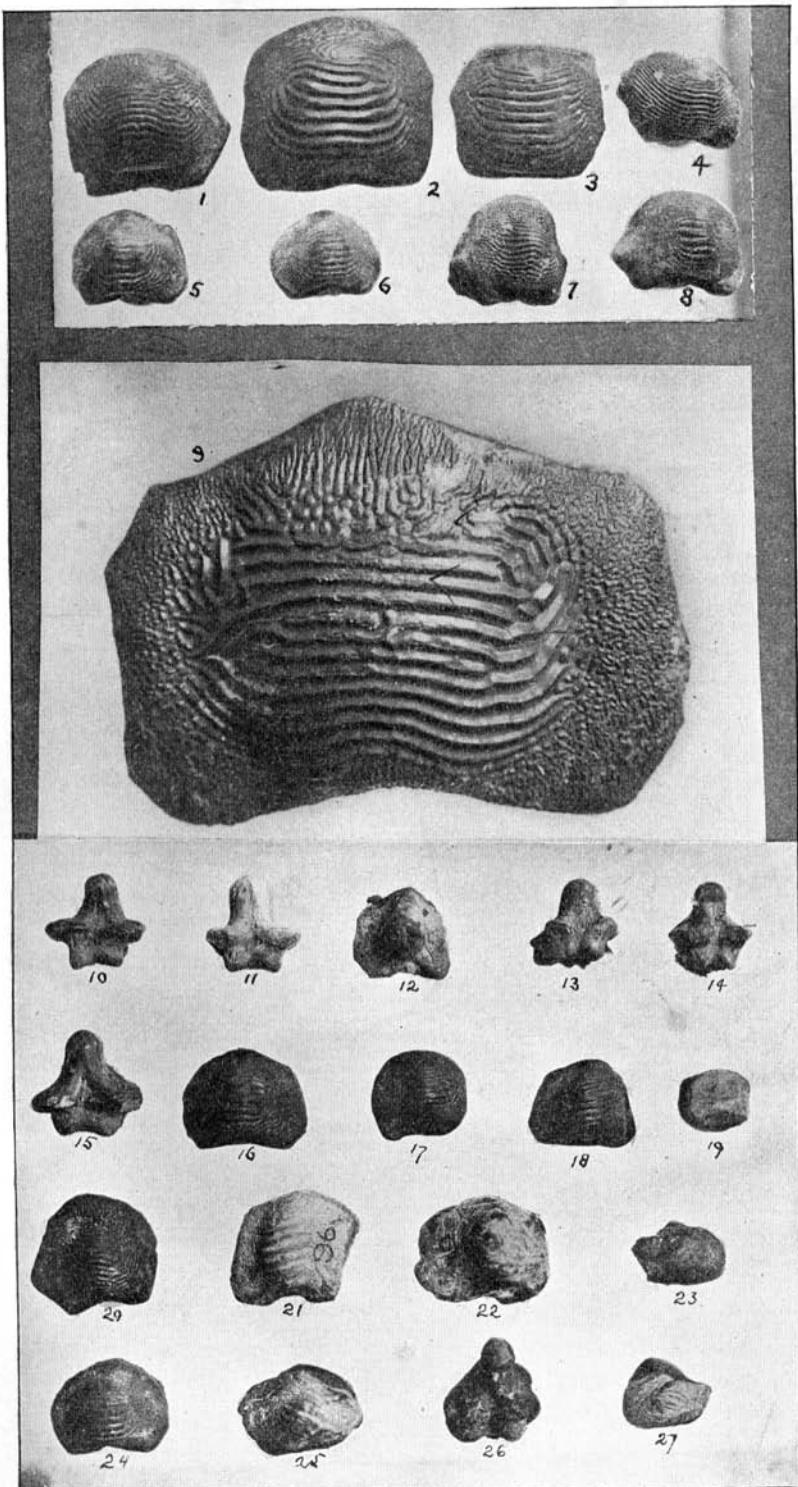
PTYCHODUS MORTONI.

University Geological Survey of Kansas.

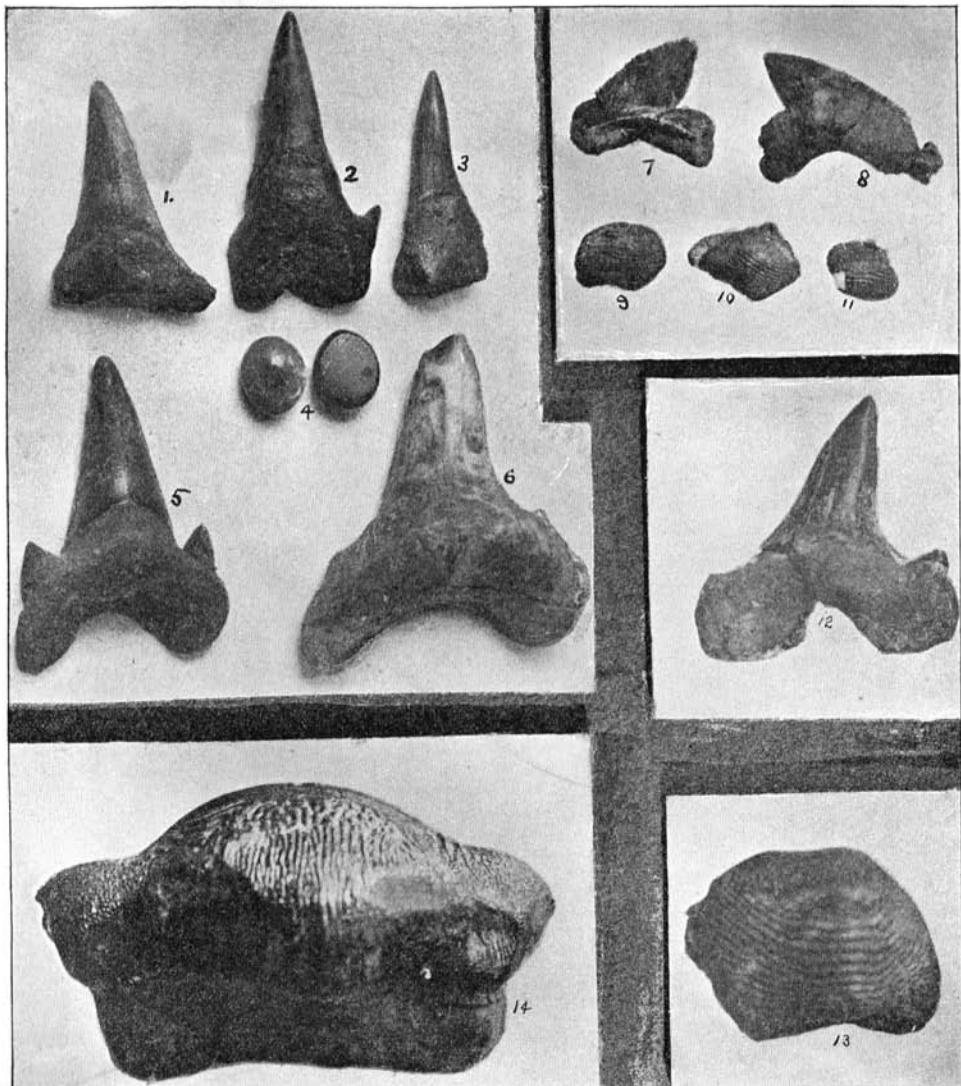
VOLUME VI. PLATE XXVIII.



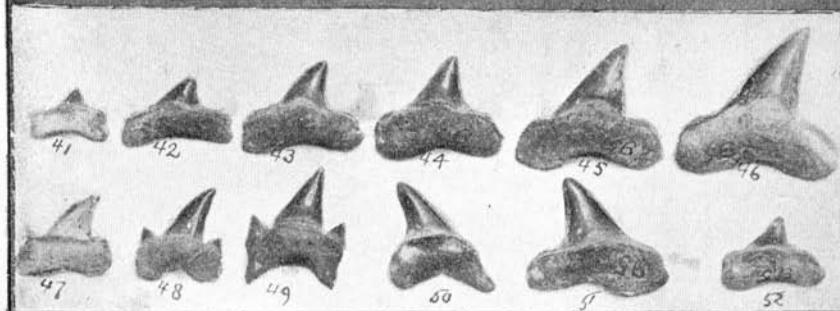
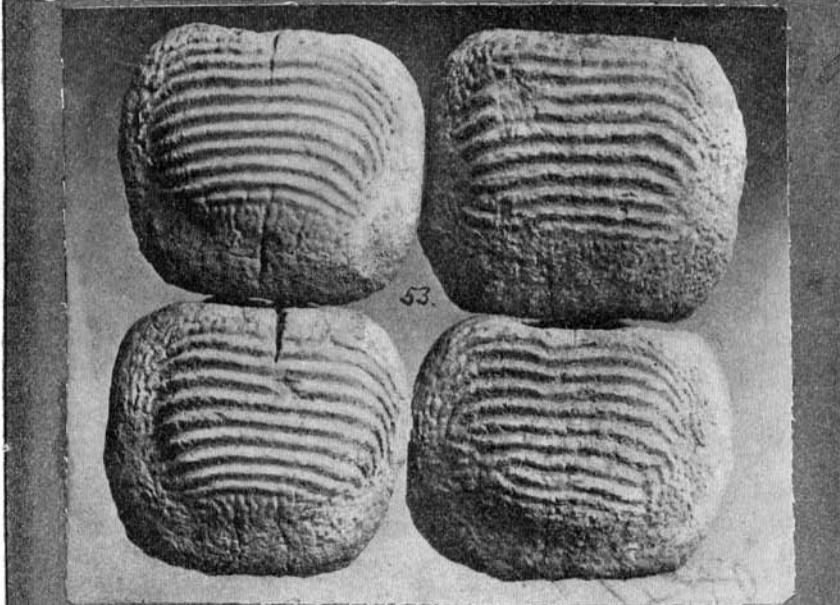
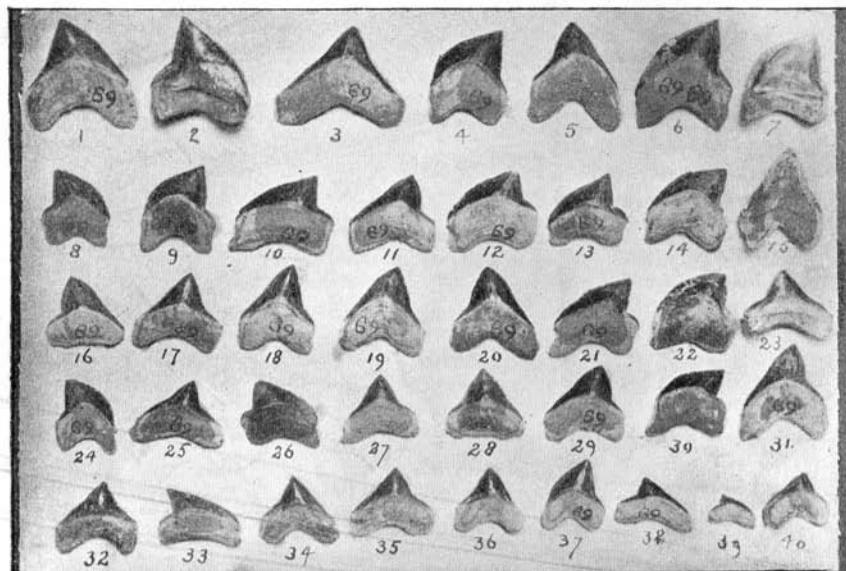
PTYCHODUS MARTINI.



PTYCHODUS.



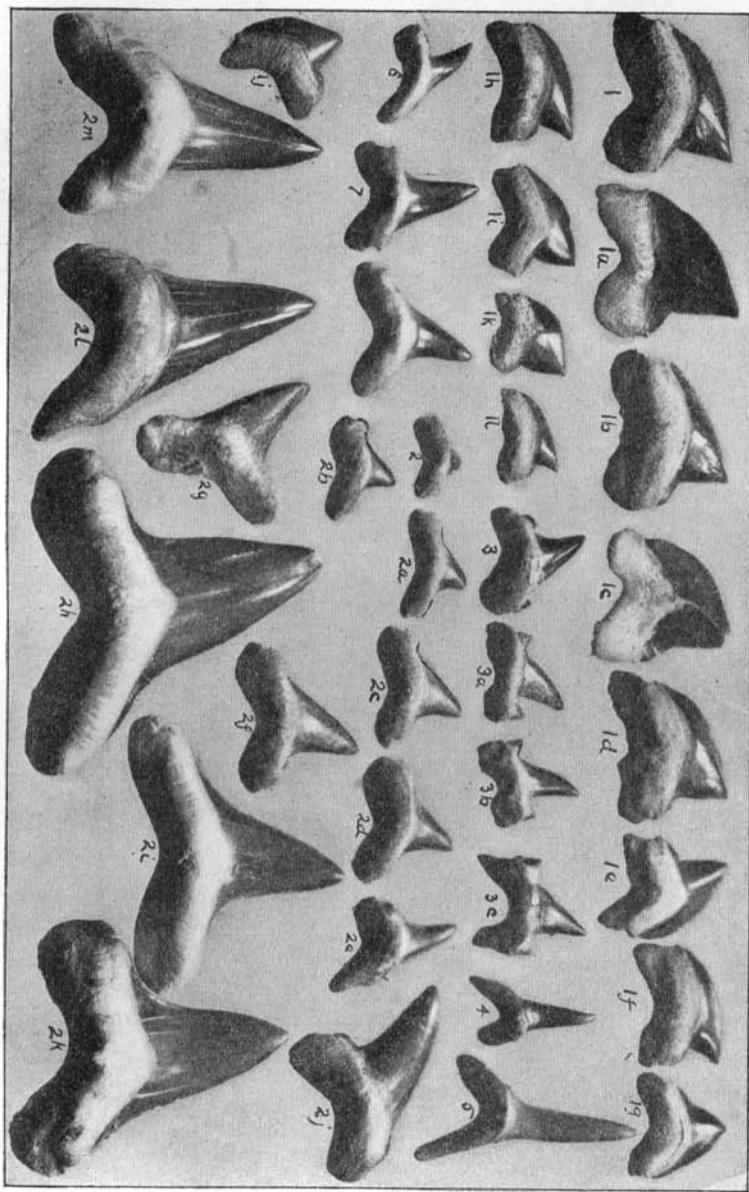
LAMNA, 1-3, 5, 6, 12. MESODON ?, 4. CORAX, 7, 8. PTYCHODUS, 9, 10, 11, 13, 14.



CORAX, 1-40.

ISURUS, 41-46, 50, 52.

PTYCHODUS, 53.



CORAX, I.

ISURUS, 2, 6, 7.

LAMNA, 3.

SCAPANORHYNCHUS, 4, 5.