PALEONTOLOGICAL NOTES
AN ICHTHYOSAURIAN CENTRUM FROM THE ALBIAN OF TEXAS
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INTRODUCTION
In May of 1960 Neil Collins, a student of Arlington State College, brought the ichthyosaurian centrum illustrated below to McNulty (Text-fig. 1). It had been borrowed from A. D. Hall of Ft. Worth, in whose family the specimen had been retained as a curiosity since its discovery more than thirty years ago by W. T. Hall, father of A. D. Hall. W. T. Hall died in 1959; consequently, information about the specimen depended upon family recollections which were properly open to question. However, conversation with family members convinced the writers that no hoax was involved. The specimen was collected from a sewer excavation on which W. T. Hall worked as a laborer. The excavation lay along Long Street in the vicinity of Marine Creek in the Rosen Heights section of Ft. Worth, Texas, and was dug between 1926 and 1929. In this locality formations ranging from the Kiamichi Shale to the Ft. Worth Limestone occur. All of these fall within the Albian Stage.

Cretaceous remains of ichthyosaurs are uncommon, particularly in North America. The first report of such remains was by Merriam (1905) who found fragments of two vertebrae in the Cretaceous Benton Formation of Wyoming. In 1914 Gilmore reported additional fragmentary remains from the same formation and state. In 1939 a moderately complete but headless skeleton was recovered from the Mowry Member (Albian) and an incomplete, poorly preserved skull and a few associated trunk remains from the Belle Fourche Member (Cenomanian) of the Benton, both from Wyoming. Nace (1939) described the first of these as Myopterygius americanus, n. sp., and the second (Nace, 1941) as M. petersoni, n. sp. No subsequent reports of Cretaceous ichthyosaurs from North America are known to the authors.

Description.—Shape almost circular, departing therefrom in a slight but definite flattening of the dorso-lateral edges; strongly amphicoelous, axially imperforate; diapophyses median-lateral, parapophyses ven-

TEXT-FIG. 1—Ichthyosaurian centrum from Albian of Fort Worth, Texas, X$$.  
A. Anterior view.  
B. Dorsal view, anterior to left.  
C. Lateral view, anterior to left.  
D. Longitudinal section of a plasteotype, anterior to left.
tbero-lateral and slightly posterior of diaphyses, both oval in outline and well separated; neurapophyses well separated, each narrowing slightly anteriorly; circumferential surfaces concave.

**Measurements:**
- Length—42 mm. at level of diaphyses; 46 mm. at median dorsal and ventral lines.
- Height—100 mm. at plane of bilateral symmetry.
- Breadth—97 mm. along line connecting, but excluding, diaphyses.
- Distance between rib articulations—25 mm. center to center.
- Distance between neurapophyses—31 mm. center to center; 24 mm. edge to edge.

**Relations.**—The median- and ventro-lateral positions of rib articulations indicate a median trunk position for this centrum.

Ichthyosaurian literature does not permit reliable comparisons of taxa by vertebral properties, much less serious inferences from a single centrum. However, it appears appropriate to note that, of the various genera of ichthyosaurs, *Myopterygius* has the most occurrence and range in the Cretaceous (von Huene, 1922). Further, it may be of interest to compare some centrum measurements of *Myopterygius campylodon* (Carter) and *M. petersoni* Nace with the Texas specimen.

<table>
<thead>
<tr>
<th></th>
<th><em>M. campylodon</em></th>
<th><em>M. petersoni</em></th>
<th>Texas specimen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>38 mm.</td>
<td>35 mm.</td>
<td>42 mm.</td>
</tr>
<tr>
<td>Height</td>
<td>108</td>
<td>90</td>
<td>100</td>
</tr>
<tr>
<td>Width</td>
<td>110</td>
<td>94</td>
<td>97</td>
</tr>
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* Data from Nace, 1941, p. 911.

**Repository.**—A. D. Hall is unwilling to part with the subject of this note, and we can submit only a plastotype. It is to be deposited in the Museum of Paleontology, Southern Methodist University, Accession number 60314.

**REFERENCES**


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**MISSISSIPPIAN STIGMARIAN PLANT FOSSIL FROM SOUTHERN NEVADA**

MARK RICH

University of North Dakota, Grand Forks

During the summer of 1957, a plant fossil (UND 1875) was found in a dark reddish-brown well indurated thinly cross-bedded quartzose siltstone near the base of the thick predominantly carbonate section of the Bird Spring Formation (Mississippian-Pennsylvanian-Permian) near Lee Canyon, Clark County, Nevada. The locality is on the north end of the line between the NE ½ NW ½ NE ¼ sec. 34, T. 17 S., R. 57 E., Charleston Peak Quadrangle, Nevada, and is about 35 miles northwest of Las Vegas (Text-fig. 1).

The specimen (Text-fig. 2) was found a few feet above the base of the Bird Spring Formation in a part of the section that has been dated as Chesterian in age on the basis of megafossils found in limestone beds just above the plant fossil (Rich, 1960, 1961). A rubber imprint of the specimen was sent to Chester A. Arnold, Department of Botany, University of Michigan, Ann Arbor, who identified the fossil as *Stigmaria* of the *S. ficoides* type. Dr. Arnold (written communication dated October 14, 1960) stated:

"The rubber imprint of the plant fossil from Nevada that you recently sent me is a specimen of *Stigmaria* of the *S. ficoides* type. This is the name widely applied to the rootlike organs of
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John C. Merriam
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