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358. A NEW SPECIES OF *PSEUDOGUEMBELINA* FROM THE
UPPER CRETACEOUS OF TEXAS

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ABSTRACT

A new species of *Pseudoguembelina* appears to be restricted to the *Globotruncana gansseri* zone. Though rare in occurrence, it may prove to be a useful index species for this zone.

INTRODUCTION

Pseudoguembelina kempensis n. sp. has been found in surface and subsurface samples from Texas. These samples contain abundant planktonic Foraminifera belonging to the *Globotruncana gansseri* zone. *P. kempensis* is rare in these samples. It may prove to be a useful indicator of the *Globotruncana gansseri* zone, since at present it is known to occur only in this zone. The species, therefore, appears to have at least local stratigraphic significance.

ACKNOWLEDGEMENT

The writer wishes to thank Mr. D. Nugent for photographing the type specimens.

Superfamily GLOBIGERINACEA Carpenter,
Parker and Jones, 1862

Pseudoguembelina kempensis n. sp.

Text figures 1-5

Test plano-biserial or biserial, consisting of 7-12 large chambers, increasing rapidly in size, and may have a small pointed early part consisting of about 7 additional chambers. The small early chambers may be coiled initially (text fig. 4). The small early chambers are not inflated and the sutures are nearly flush with the chamber surface. The surface is punctate with the alignment of the pores, particularly towards the outer margin, sometimes suggesting faint striae (text fig. 3). The microspheric forms tend to lack spines and are not as thick. The third pair of chambers is the most strongly inflated, after which later chambers tend to be less inflated and, finally, somewhat compressed. The last chamber may be very elongate and may extend completely over the preceding two chambers. On the megalospheric forms, the first few large chambers usually have short thick spines that may tend to merge to form a sort of ridge. These tend to impart a knobby appearance to the chamber (text fig. 2). Text figs. 3 and 4 show the extremes in the degree to which the test is pointed. The sutures are deeply depressed between the large chambers. A rather thick conspicuous carina is present. The primary aperture is a large lunate arch in all chambers except the last one (text fig. 5). With the completion of the final chamber, the primary aper-

ture is reduced to a narrow slit which tends strongly to become or actually forms three separate apertures (text fig. 2). In addition to the primary aperture or apertures, there are usually at least three pairs of narrow slit-like accessory apertures with prominent flaps.

P. kempensis n. sp. can be distinguished from *P. cornuta* Seiglie, 1959; *P. costulata* (Cushman, 1938); *P. excolata* (Cushman, 1926) of which *P. costata* (Carsey, 1926) is a junior synonym; *P. palpebra* Brönnimann and Brown, 1953, and *P. striata* (Ehrenberg, 1838) in lacking well developed costae or striae. *P. kempensis* differs from *P. punctulata* (Cushman, 1938) and *P. striata* (Ehrenberg, 1838) in having more elongate arcuate later chambers and more circular early chambers. Also, *P. kempensis* appears to differ from all other species of *Pseudoguembelina* in possessing a thick prominent carina.

Dimensions.—Holotype (text figs. 1, 2): 0.407 mm. length; 0.259 mm. width; 0.148 mm. thickness, H.V.H. no. 8082. Paratype (text figs. 4, 5): 0.383 mm. length; 0.284 mm. width; 0.136 mm. thickness, H.V.H. no. 8083. Paratype (text fig. 3): 0.420 mm. length; 0.252 mm. width; 0.144 mm. thickness, H.V.H. no. 8084.

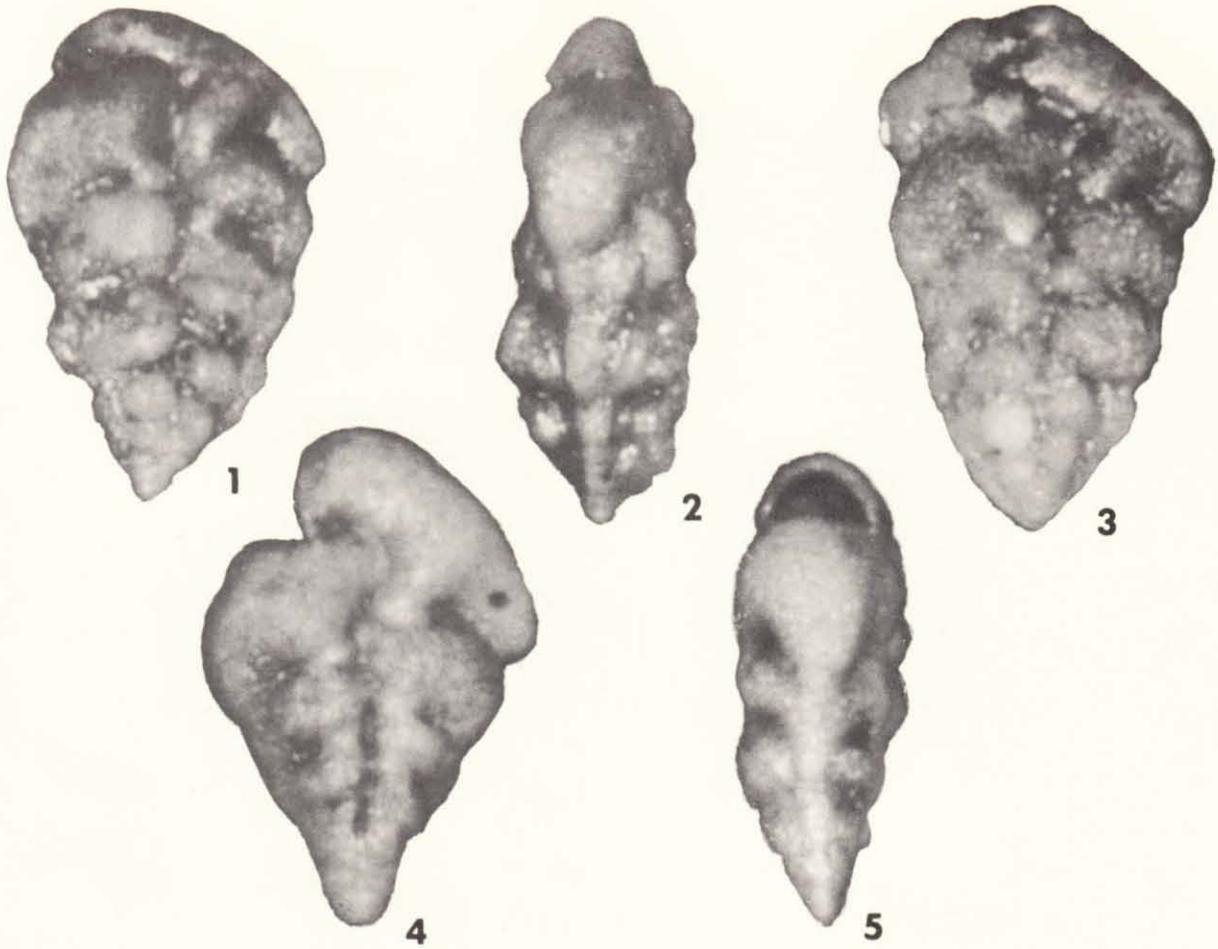
Depository.—H. V. Howe Collection, School of Geology, Louisiana State University. Holotype, H.V.H. no. 8082; paratype, H.V.H. no. 8083; paratype, H.V.H. no. 8084; and 7 paratypes, H.V.H. no. 8085.

Type locality.—Kemp Clay, 2-4' below the contact between the Littig Conglomerate and the Kemp Clay, on Walker's Creek about 5½ miles NE of Cameron, Texas.

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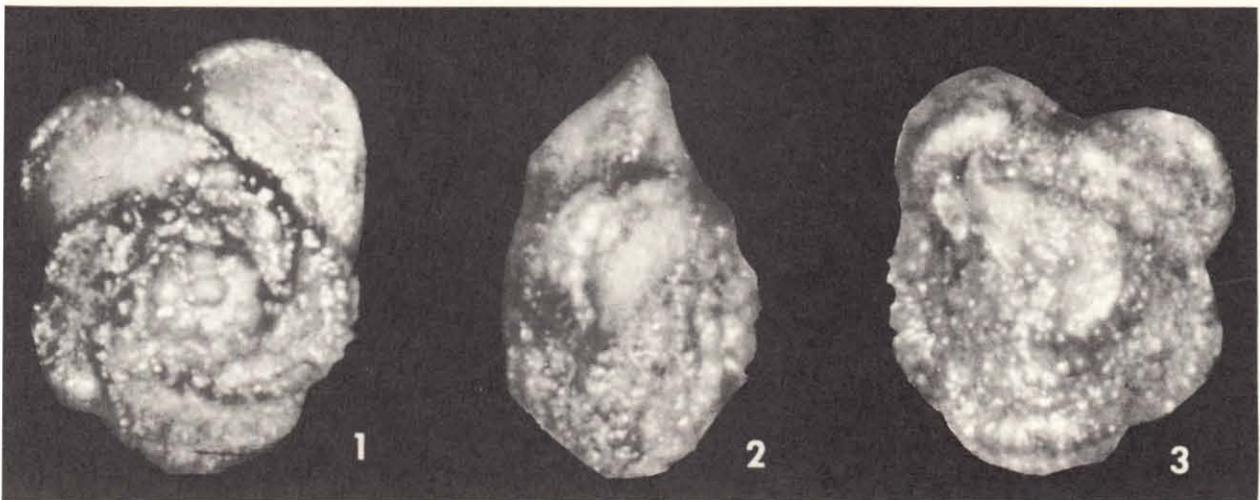
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Text Figures 1-5



Esker: *Pseudoguembelina* from Texas

Text Figures 1-3



Esker: Lectotype of *Globotruncana rosetta* (Carsey)

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EXPLANATION OF TEXT FIGURES

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