

Of 58 " 43 or 74.1 per cent. have gr. diam. 24 mm., and over.
 Of 26 *stearnsiana* 12 or 46.1 per cent. have gr. diam. 23 to 24 mm.
 Of 26 " 21 or 80.7 per cent. have gr. diam. 24 mm. and under.

Of 58 *kelletii* 56 or 96.5 per cent. have whorls 5 to 5 +.

Of 26 *stearnsiana* 19 or 73.1 per cent. whorls $5\frac{1}{2}$ to $5\frac{3}{4}$.

A series of 31 *kelletii*, selected by Hemphill to show variation in size, shape and color, but not included in above lot, are from $20\frac{1}{2}$ to 31 mm. gr. diam., whorls $4\frac{1}{2}$ to $5\frac{1}{3}$; 23 or 74.2 per cent.; ~~are~~ ^{are} 24 mm. and over and 18 or 58.6 per cent. have 5 to 5 + whorls.

Summing up: *E. kelletii* is the species found on Santa Catalina Island, having a large embryonic shell with smooth whorls, surface of all the later whorls faintly granulated; generally over 24 mm., greatest diam.; whorls 5. (On the mainland at Pt. Vincent, Los Angeles Co., Hemphill found dead shells which agree exactly with those from Santa Catalina, but could find none alive). *E. stearnsiana* is confined to the mainland and the islands of Lower California. Embryonic shell smaller, sculptured with wavy lines giving it a granulated appearance, remaining whorls smooth except for lines of growth and sometimes faint revolving lines; greater diam. generally under 24 mm., whorls $5\frac{1}{2}$ to $5\frac{3}{4}$.

There is a wide variation in size, color and shape in both species and a number of the forms of *kelletii* have been named by Hemphill. Measurements below show largest, smallest, most elevated and most depressed of 89 *kelletii* and 26 *stearnsiana* in my collection.

E. kelletii, largest, 31 x 26 x 23 mm. whorls $5\frac{1}{4}$.

" smallest, $20\frac{1}{2}$ x $17\frac{1}{2}$ x $16\frac{1}{2}$ mm. whorls —5.

" elevated, 26 x $23\frac{1}{2}$ x 25 mm. whorls $5\frac{1}{2}$.

" depressed, 26 x 21 x 18 mm. whorls 5.

E. stearnsiana, largest, $25\frac{1}{2}$ x 22 x $21\frac{1}{2}$ mm. whorls 6.

" smallest, 20 x 17 x $15\frac{1}{2}$ mm. whorls 5 +.

" elevated, 21 x $20\frac{1}{2}$ x $20\frac{1}{2}$ mm. whorls $5\frac{1}{2}$.

" depressed, 23 x $19\frac{1}{2}$ x 16 mm. whorls $5\frac{1}{2}$.

MOLLUSKS OF OKLAHOMA.

BY JAS. H. FERRISS.

Few if any shells have been recorded from Oklahoma territory. No state or territory in the Union has figured so little in concholo-

Ferriss

gical liter
obtaining
Polygyra
Polygyra
Helicodis
Zonitoides
Zonitoides
Zonitoides
Euconul
Strobilop
Pupoide
Bifidaria
Bifidaria
Lymnaea
Planorbi

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kelleitii, selected by Hemphill to show variation in color, but not included in above lot, are from $20\frac{1}{2}$ to $21\frac{1}{2}$ mm., whorls $4\frac{1}{2}$ to $5\frac{1}{2}$; 23 or 74.2 per cent.; ^{are} ~~one~~ 24 mm. or 58.6 per cent. have 5 to 5 + whorls.

E. kelleitii is the species found on Santa Catalina large embryonic shell with smooth whorls, surface of whorls faintly granulated; generally *over* 24 mm., whorls 5. (On the mainland at Pt. Vincent, Los Hemphill found dead shells which agree exactly with Catalina, but could find none alive). *E. stearnsiana* on mainland and the islands of Lower California all smaller, sculptured with wavy lines giving it a variance, remaining whorls smooth except for lines of sutures faint revolving lines; greater diam. generally whorls $5\frac{1}{2}$ to $5\frac{3}{4}$.

The variation in size, color and shape in both species of the forms of *kelleitii* have been named by Hemphill. The largest, smallest, most elevated and most depressed of 89 *kelleitii* and 26 *stearnsiana* in my collection.

Largest, 31 x 26 x 23 mm. whorls $5\frac{1}{4}$.
 Smallest, $20\frac{1}{2}$ x $17\frac{1}{2}$ x $16\frac{1}{2}$ mm. whorls —5.

Elevated, 26 x $23\frac{1}{2}$ x 25 mm. whorls $5\frac{1}{3}$.
 Depressed, 26 x 21 x 18 mm. whorls 5.

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 Depressed, 23 x $19\frac{1}{2}$ x 16 mm. whorls $5\frac{1}{2}$.

MOLLUSKS OF OKLAHOMA.

BY JAS. H. FERRISS.

Shells have been recorded from Oklahoma territory. Territory in the Union has figured so little in concholo-

gical literature. In 1897 I collected a few hours in Oklahoma City, obtaining the following species:

Polygyra texasiana (Moric).	Planorbis bicarinatus (Say).
Polygyra monodon (Rack.).	Planorbis parvus (Say).
Helicodiscus lineatus (Say).	Physa sp.
Zonitoides minuscula (Binn.).	Lampsilis anodontoides (Lea).
Zonitoides arborea (Say).	Lampsilis purpuratus (Lam.).
Zonitoides nitida (Müll.).	Lampsilis gracilis (Bar.).
Euconulus fulvus (Müll.).	Lampsilis parvus (Lea).
Strobilops affinis (Pils.).	Quadrula lachrymosa (Lea).
Pupoides marginatus (Say).	Quadrula pustulosus (Lea).
Bifidaria armigera (Say).	Tritogonia tuberculata (Bar.).
Bifidaria contracta (Say).	Symphynota complanata (Bar.).
Lymnæa probably techella (Hald.).	Sphaerium sp.
Planorbis trivolvis (Say).	Pisidium sp.

NEW SPECIES OF PISIDIUM.

BY V. STERKI.

Pis. minusculum, n. sp. Mussel minute, slightly oblique, medium inflated; superior margin short, moderately curved, bounded by slightly projecting, rounded angles; supero-anterior and posterior slopes little curved or straight, posterior end rounded, anterior a rounded angle situated much below the median longitudinal line, inferior margin rather well curved; beakes slightly posterior, rather large, rounded or somewhat flattened, moderately projecting over the hinge margin; surface with very fine, slight striæ, somewhat shining, color pale horn, shell translucent; hinge rather stout, cardinal teeth: the right strongly curved, its posterior part much thicker and grooved, left anterior rather short, well curved, the posterior longer, oblique, curved; "laterals" strong, the outer ones in the right valve well formed; ligament, short, thick.

Long. 2.2, alt. 1.8, diam. 1.5 mill.

Habitat: Fox river, Wisconsin, collected by the late Geo. H. Marston; types in the collection of the University of Wisconsin and that of the Carnegie Museum.

A number of specimens of this little *Pisidium* was received in 1895 and then recognized as a new species, and again in 1904, when