

SOME NEW SPECIES OF CORALS FROM THE  
NIAGARAN STRATA OF THE HUDSON.  
BAY REGION

BY

DENARD LEE

*State Geological Survey, Urbana*

Among the corals that were collected by Dr. T. E. Savage and Dr. Francis Van Tuyl in the area of the Silurian rocks outcropping to the west and southwest of Hudson Bay, the writer has found three new forms that he identified as belonging to the genus *Streptelasma*.

*STREPTELASMA SAVAGEI* n. sp.

Fig. 1

Corallum large, slightly curved, subconical, total length of a complete specimen unknown, the length of the holotype is 4.5 centimeters on the concave side and 6.5 centimeters on the convex side. The surface is marked by strong wrinkles of growth about 20 millimeters apart, between these larger wrinkles are from five to seven smaller, less distinct ones; all of these are marked by vertical ridges that correspond to the septa within. Calyx moderately deep, having at the fossula a wall 3 millimeters thick. Septa numbering one hundred thirty-four or more and alternate in size; the primaries extend to the center or two or more join before the center is reached. The inner ends of the primary septa are twisted into a pseudo-columella that is about 6 millimeters in height. Secondary septa greatly reduced in size and occupying the spaces between the primaries. Cardinal septum is in a fossula that is about 1 centimeter deep and 1 centimeter in width. Dissepiments few and flat or convex upward.

Probable length of a complete specimen at least 9 centimeters.

The greatest diameter of the corallum is 6.5 centimeters. At a distance of 6.3 centimeters below the calyx the diameters are 4.5 centimeters and 3 centimeters, the somewhat elliptical character of the cross-section may be the result of compression.

Holotype No. 857-F3 University of Illinois collection.

Niagaran:—Ekwan River limestone at Flint Rapids, Ekwan River, Canada.

*STREPTELASMA EKWANENSIS* n. sp.

Fig. 2

Corallum simple, large, tapering, and somewhat curved; the upper part of the corallum having less curvature than the lower part. The holotype measures 12.5 centimeters along the convex side, and the calyx diameter is 4.5 centimeters. The depth of the calyx is unknown but from the somewhat imperfect specimen at hand the depth was not more than 2.5 centimeters to 3 centimeters. The septa are of equal size; forty-eight were counted in two-thirds of the circumference of the calyx or about nine septa in the distance of 1 centimeter. The septa are thick towards the periphery, but rapidly thin as they pass towards the center; in some cases the inner edges of two or three septa unite before the center is reached. The walls between the septa are marked vertically with low rounded ridges which may represent faint secondary septa. Dissepiments concave, abundant, about eight in the distance of 1 centimeter near the outer margin; near the periphery they bend downward and towards the center they bend upward where, with the twisted ends of the septa, they form a vesicular or lacunose core. The external surface is marked vertically by ridges that correspond to the septa within, especially where slightly weathered.

Holotype No. 607-C8 University of Illinois collection. Paratypes No. 814-F1, 830-F2 University of Illinois collection.

Niagaran:—Ekwana River limestone about one and one-half miles above Limestone Island, Seven River, Canada; and at Upper Rapids and Flint Rapids, Ekwana River Canada.

*STREPTELASMA TURBIMATUS* n. sp.

Fig. 3

Corallum large with an average length measured along the convex side of 5.4 centimeters and along the concave side the length is 2.8 centimeters. The curvature is rather rapid in the basal part but becomes less rapid toward the upper part of the corallum. The greatest width of the calyx, which is at right angles to the plane of curvature, is 3.7 centimeters. The calyx is shallow, and in some specimens is compressed so that it is elliptical in cross-section. In the center of the calyx there is a distinct low pseudo-columella formed by the twisting together of the inner ends of the septa. The septa alternating in size, the longer reaching the center or two or more join and then pass on to the center; the secondary septa are much reduced in length and are sometimes obsolete. Dissepiments usually more than 1 millimeter apart and are flat. The exterior surface is marked by wrinkles of growth and vertical lines that correspond to the septa within.

Holotype No. 801-F1 University of Illinois collection.

Niagaran:—Ekwan River limestone at the Upper Rapids, Ekwan River, and a short distance above the first rapids below the mouth of the Fawn River, on the Severn River, Canada.

Remarks—*Streptelasma savagei* is characterized by its large size, sub-conical form, distinct growth markings and the comparative scarcity of dissepiments. *Streptelasma ekwanensis* differs from the former in that it tapers less rapidly, the wrinkles of growth are absent or indistinct, and the dissepiments are abundant and form, with the twisted inner ends of the septa, a prominent vesicular core. *Streptelasma turbinatus* is characterized by its turbinate form, being rather strongly curved in the basal part, and its shallow expanded calyx.

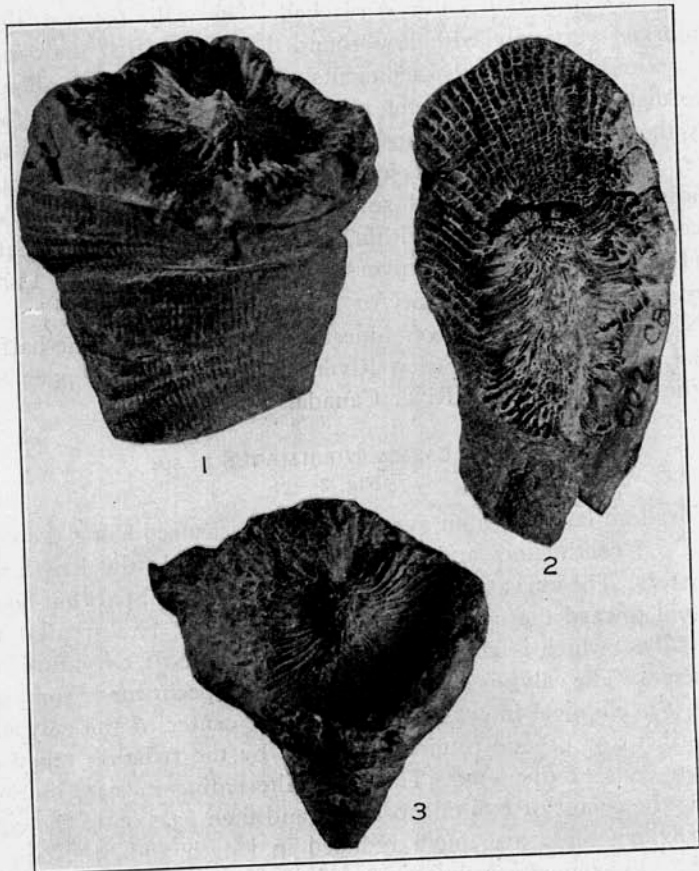


FIG. 1. *Streptelasma savagei* n. sp.  
 FIG. 2. *Streptelasma ekwanensis* n. sp.  
 FIG. 3. *Streptelasma turbinatus* n. sp.  
 (About four-fifths actual size.)