slender root spicules scattered on one of the slabs. On another specimen are large and strong forking spicules, the principal ray being about 1.5 centimetre in length, with a bulb or expansion at base, giving off two or more shorter and stout rays. They are quite different from any of the forms found at Metis.

These specimens are from beds referred to the Levis or Sillery formation, and are therefore approximately of the same age with those at Metis. They indicate the wide distribution of Hexactinellid silicious sponges in rocks of this period, and hold out the prospect of the discovery of additional species.

Mr. Ami also showed me a new sponge recently discovered by him in the Utica Shale at Ottawa. It consists of radiating groups of long slender simple spicules in a pyritized state. He hopes to make further collections from the same bed before describing these interesting forms, which resemble the spicules of the Pleistocene Tethea Logani, so common in the Leda clay of the St. Lawrence, but which may possibly be root spicules of a Hexactinallid sponge, as there are obscure cruciform spicules on the same slab.

## Notes on Sponges from the Quebec Group at Mètis, and from the Utica Shale.

BY GEORGE JENNINGS HINDE, PH.D.<sup>1</sup>

Through the kindness of Sir J. W. Dawson, F.R.S., I have had the opportunity of studying a series of specimens of the fossil sponges lately discovered in the Quebec group at Little Métis by Dr. Harrington, and also of an example of *Cyathophycus reticulatus*, Walcott, from the Utica shale formation. The Metis specimens are specially interest-

<sup>1</sup> These Notes, kindly communicated by Dr. Hinde, arrived after the previous paper was in type; and are added without change. -J.W.D.