Thus, of Cambrian rocks in the St. John Basin, taking the measurements where the structure is not too much complicated by faults and folds, and where the several members attains their greatest thickness, we have the following:

,	Thickness in feet.
Basal Series (Etcheminian) at Hanford Brook, St. Martins Division 1 (Acadian) at the Alms House, Simonds, Division 2 (Johannian) at King's Square, Carleton, Division 3 (Bretonian) at Straight Shore, Portland,	3, 1,200 650 1,000

The thickness of Division 2 is probably greater in the city than in Carleton; it appears to be 2,000 feet, but there are no doubt folds in the beds, not easily detected, that produce this great apparent thickness.

Probably the whole thickness measured, where the several divisions show the greatest bulk, and including the Basal

Series, would not fall far short of 4,000 feet.

This is not equal to the thickness of the Welsh Cambrian rocks which is greatly increased by intercalated beds of

volcanic ashes, etc.

The faunas, or assemblages of animals in the St. John rocks, as shown by their remains, exhibit a remarkably close resemblance to those of Cambrian rocks around the Baltic Sea, though separated from them by the wide Atlantic. On the other hand they have very little resemblance to the Cambrian faunas of the interior of America, though only a few hundred miles lie between.

In the following table the species in each genus are arranged generally in the order of their antiquity, and the following abbreviations are used:—v=variety; sp.=species; r=rare; cf=compare with; nar=narrow. Also for authors:

Htt. = C. F. Hartt.

Dn. = Sir J. W. Dawson,
Dav = T. Davidson.
Salt. = J. W. Salter.
Hick. = Hy Hicks.
Walc. = C. D. Walcott.

L. = Linnæus.
Ang. = Angelin.
Brög. = Brögger.
Eich. = Eichwald.
Pand. = Pander.
Wahl. = Wahlenberg.
Lins. = J. Linnarsson.

Where no reference is given the species have been described by the author in the volumes of the transactions of the Royal Society of Canada, or are unpublished. To the latter category belong Nos. 22,23,27,35,36,64a and b,67,77,78,79,137,140,146.