

section of the entire thickness. In order to get an idea of the whole formation, it is, therefore, necessary to measure the rocks exposed at each favorable outcrop, and correlate the various sections. Fortunately there are a few beds which may easily be recognized by their lithology and fossils. One of the most useful of these beds is a very black thin-bedded shale containing *Isochilina? clavigera*, a large and easily recognized ostracod. This bed is exposed opposite Mr. Sowter's house on Broad Street, Aylmer, beside the electric railway one mile west of Westboro, near the ruins of Skead's Mill, and was revealed in a trench on Buena Vista Road, at the corner of Minto Place, Rockcliffe, during excavations made this last summer. A second horizon is indicated by thin-bedded limestone containing *Onchometopus simplex*, and always followed by a layer full of a species of *Beatricea*. This horizon was found at Aylmer, Mechanicsville, and on a road leading to the river from a point just east of Robilliard's quarries on the Montreal Road. A few other easily recognized beds have been found useful in checking up the correlations made on the basis of the two just described.

SECTIONS.

The lower portion of the formation is best displayed at Rockcliffe, where the following section was measured, the beds being given in descending order:—

	Ft.	Ft.
4. Green shale with numerus <i>Lingula</i>	5	5
3. Heavy-bedded, light gray sandstone.....	10	15
2. Rather heavy-bedded light gray sandstone with some cross-bedding, and thin layers of coarse grains of sand. <i>Camarotoechia plena</i> and <i>Hebertella imperator</i> at the base.....	10	25
1. Shaly, thin-bedded, light colored sandstone with lenses of heavy-bedded sandstone. <i>Rusophycus grenillensis</i> and other burrows and trails are common.....	53	78

At this locality the base of the black layer with *Isochilina? clavigera* is about 31 feet above the top of this section. A large part of the intervening strata are concealed here, but are well exposed at the Hog's Back, where the following section was measured.

	Ft.	In.	Ft.	In.
7. Dark brown and black shale with ostracods.....	4		4	
6. Rather pure, dark gray limestone with ostracods and bryozoa.....	1		5	