

In No. 5 we find:

Lingulepis Mæra.	Dicellosephalus angustifrons.
Lingulepis minuta.	Dicellosephalus Marica.
Lingula ? manticula.	Dicellosephalus bilobus.
Obolella discoidea.	Dicellosephalus Osceola.
Acrotreta gemma.	Ptychoparia affinis.
Kutorgina minutissima.	Ptychoparia Oweni.
Agnostus communis.	Ptychoparia Hagnei.
Agnostus bidens.	Ptychoparia granulosa.
Agnostus Neon.	Ptychoparia simulata.
Agnostus prolongus.	Ptychoparia unisulcata.
Agnostus tumidosus.	Ptychoparia breviceps.
Agnostus tumifrons.	Arethusina Americana.
Dicellosephalus ? nasutus.	Ptychaspis minuta.

Three of these species, *Hyolithes primordialis*, *Dicellosephalus Osceola*, and *Ptychaspis minuta*, are identical with forms from the Potsdam sandstone of Wisconsin.

§ 58. The above section and details are given to show the relation of the Georgia, or Olenellus, to the Potsdam horizon. The section of 7,700 feet of strata is continuous and entirely visible throughout its extent, as it forms the summit and eastern slope of Prospect Peak and crosses the Hamburg ridge. Hammer in hand I examined it, and collected fossils at all places where they could be found. The Olenellus horizon is separated by 3,000 feet of limestone from a fauna that can be correlated with the Potsdam fauna of New York and the Mississippi Valley, and 1,600 feet of calcareous shale intervene before a typical Potsdam fauna is reached at the summit of No. 3. This section is typical, as it fixes the horizon of the Georgia fauna below that of the Potsdam, without the shadow of suspicion thrown on it, which there is on the Georgia section, as the latter may be defective through faulting in the shaly argillites above the Olenellus horizon.

§ 59. A section taken in the Highland Range, 125 miles south of the Eureka section, gives a greater variation of sedimentation in the lower portion and less in the upper, and we find that the variation was more favorable to the development and preservation of the fauna, as is shown by the Highland Range section, having an abundant and more varied fauna in the lower 1,500 feet above the quartzite, while in the Eureka section the upper or Potsdam fauna is much larger than in the Highland section.

The section was measured on the west side, half way between Bennett's Spring and Stampede Gap. The base of the section begins at the Quaternary, on the western slope, and the summit forms the highest point of the range.

	Feet.
1. Dark reddish-brown quartzite, evenly bedded, and ripple-marked in some places	350
2. Bluish-gray limestone	35