

§ 60. The Eureka Cambrian section gives 750 feet more strata between the quartzite at the base and the base of the Lower Silurian (Ordovician) above; a variation not unexpected, as both the latter and the Devonian strata decrease in thickness between the Eureka and the Southern Nevada sections.

§ 61. The shales above the lower quartzite carry two species in the Highland Range that occur at the same horizon in the Eureka district, viz, *Olenellus Gilberti* and *O. Iddingsi*.

§ 62. The great thickness of strata between the shales carrying *Olenellus* and division 21 of the section contains more or less remains of trilobites, mostly fragments of the genus *Ptychoparia*.

§ 63. On the east side of the anticlinal arch at Pioche, 20 miles east of the Highland section, the strata resting on the quartzite (2, 3 and 4 of section) contain the following species, four of which are found in the two localities:

<i>Eocystites</i> ?? longidactylus.	<i>Hyalithes</i> Billingsi.
<i>Lingulella</i> Ella.	<i>Olenellus</i> Gilberti.
<i>Kutorgina</i> pannula.	<i>Olenoides</i> levis.
<i>Acrothele</i> subsidua.	<i>Crepicephalus</i> Augusta.
<i>Acrotreta</i> gemma.	<i>Crepicephalus</i> Liliana.
<i>Orthis</i> Highlandensis.	

§ 64. The second strongly marked faunal horizon (21 of the section), or the *Olenoides* fauna, is better shown in the Ely Mountains, just east of the Highland Range, owing to mining operations which have cut into and thrown out large masses of the shales. The same species occur at each locality. The list is given in the section.

§ 65. The fauna of the great limestone belt, above 21, is so obscured by the character of the matrix that only a few specimens were found on the line of the section. One of the species is a small *Ptychoparia* with an occipital spine; and, from the head, it is identified with *Ptychoparia minor* of the Wisconsin Potsdam fauna. Two other species of *Ptychoparia* occur that are not yet specifically identified. A mile south, on the strike of the strata, an anticlinal, accompanied by a fault, has thrown the limestone down so that a partial section is given; and here a strongly marked Upper Potsdam fauna occurs.

§ 66. The following species are identified:

<i>Bellerophon</i> antiquatus.	<i>Dicellocephalus</i> sp. †
<i>Pleurotomaria</i> , 3 undt. sp.	<i>Ptychoparia</i> ( <i>Euloma</i> ?) <i>dissimilis</i> .
<i>Hyalithes</i> , 3 n. sp.	<i>Ptychoparia</i> sp. †
<i>Dicellocephalus</i> Popinensis.	<i>Arethusina</i> Americana.
<i>Dicellocephalus</i> (type of <i>D. Minnesotensis</i> ).	<i>Illæurus</i> sp. †

Of this fauna two species are identical with those from the higher Potsdam fauna at Eureka, viz: *Ptychoparia* (*E.?*) *dissimilis* and *Arethusina Americana*; and *Bellerophon antiquatus* and *Dicellocephalus Popinensis* occur in the upper Potsdam sandstone of Wisconsin. The presence of the *Pleurotomaria*-like shells and the species just mentioned