

character, 5 to 6 feet thick, at the top of the formation has been extensively quarried in Buffalo by the Buffalo Cement Co. and also at Williamsville for the production of natural cement. The cement produced at Akron, 12 miles east of the quadrangle, is also from the same stratum.

At the quarry of the Buffalo Cement Co. the Bertie waterlime is 53 feet thick, as shown by the core of a well drilled in 1883, now in the museum of the Buffalo Society of Natural Sciences.

This rock is exposed along the west side of Niagara river, between the International bridge and the stone church; in the bed of Scajaquada creek in Forest Lawn cemetery; very abundantly in the Buffalo Cement Co.'s quarries and at Williamsville, on this quadrangle; also at Falkirk, Indian Falls, Morganville, North Leroy, Garbuttsville, Honeoye Falls, East Victor, Phelps and other places to the east of this quadrangle; and toward the west at Bertie Ont., whence the name of the formation is derived.

This formation is characterized by an abundant and peculiar crustacean fauna; in fact it has long been famous for its strange lobsterlike fossils belonging to the extinct orders, Eurypterida and Phyllocarida and the cement quarries of Buffalo have proved veritable treasure chambers of these odd creatures. The following species have been observed in the vicinity of Buffalo.

The ostracod, *Leperditia scalaris* Jones, occurs abundantly in the lower part of the formation as exposed along Scajaquada creek in Forest Lawn cemetery.

The cement layer has furnished the following species of fossils:

<i>Ceratiocaris acuminata</i> Hall (Ceratiocaris grandis Pohlman)	<i>E. scorpionis</i> Grote & Pitt
<i>Eurypterus lacustris</i> Hall	<i>Pterygotus acuticaudatus</i> Pohlman
<i>E. remipes</i> De Kay	<i>P. bilobus</i> Huxley & Salter
<i>E. giganteus</i> Pohlman	<i>P. buffaloensis</i> Pohlman
<i>E. pustulosus</i> Hall	<i>P. cummingsi</i> Pohlman
<i>E. robustus</i> Hall	<i>P. macrophthalmus</i> Hall
<i>E. pachychirus</i> Hall	<i>P. quadraticaudatus</i> Pohlman
<i>E. dekayi</i> Hall	<i>P. globicaudatus</i> Pohlman
<i>Dolichopterus macrochirus</i> Hall	<i>P. cobbi</i> Hall
<i>Eusarcus grandis</i> Grote & Pitt	<i>Leperditia scalaris</i> Jones

Besides these crustaceans some brachiopods belonging to the genera *Orbiculoidea* and *Lingula* and some seaweeds have been found; among these *Bythotrephis lesquereuxi* Grote and Pitt.

#### Cobleskill waterlime

The bed which overlies the Bertie waterlime has lately been properly correlated by Hartnagel<sup>1</sup> with the Cobleskill limestone (formerly Coralline limestone) of eastern New York. Previously it

<sup>1</sup>State Paleontol. An. Rep't 1902. N. Y. State Mus. Bul. 69. 1903.