

So far as the writer is aware there are only three reported occurrences of the genus *Crepicephalus* in the beds below or immediately above the line separating the Lower from the Middle Cambrian. First in the Pioche formation of Nevada (page 120), second in a limestone with *Albertella* on Mount Stephen, British Columbia¹, and third in interbedded limestones in a Middle Cambrian shale immediately overlying a quartzite on an island east of Niang-Niang-Kung, Liau-tung, Manchuria.² The limits of this paper will hardly permit the inclusion of any further reference to the latter occurrence or to the relations between this shale series and the horizons under discussion. The Middle Cambrian aspect of the fauna of No. 5 of the Burton formation (page 125) was evident at the time its study was undertaken, but the association in the same 1-inch layer of two species of *Crepicephalus* and a representative of the genus *Albertella* suggested the comparison of the Burton formation with the *Albertella* fauna and the Pioche formation, horizons which had both been referred to the Lower Cambrian.

Analysis of the *Albertella* fauna in the other regions from which it has been identified (see pages 118-119) revealed the lack of any necessity for the assumption that its Lower Cambrian age was infallible, and the writer turned his attention to the Pioche. This was shown (pages 121-123) to be divisible into Lower and Middle Cambrian zones respectively, and even to comprise faunas which, at the type locality of the *Albertella* fauna, are separated by 1,600 feet of limestone. At the type locality of the Pioche formation the range of faunas included in that unit does not appear to be so large and the Middle Cambrian horizon, to which the name *Crepicephalus* zone has been applied (see page 123) is to be correlated, at least tentatively, with the Burton formation. The correlation of the Burton formation with the *Albertella* fauna is based largely upon the presence in the former of an *Albertella*, a genus which, according to our present information, is confined in the Cordilleran region to this one horizon. The weight of evidence so largely opposes the Lower Cambrian age of these formations and corroborates their refer-

¹Walcott: Smithsonian Misc. Coll., vol. 53, No. 5, 1908, p. 213.

²Walcott: Research in China, vol. 3, 1913, p. 26, locality 35r.