nell's report,\* and the identity stated, on the authority of Mr. Whiteaves, of three forms with species of the Queen Charlotte Islands formation. Mr. Whiteaves' subsequent detailed study of these fossils fully confirms and further carries out the correspondence between the two faunas, as explained by him in a report now in process of publication.<sup>+</sup> Thus the very important fact is established of the existence of an identical earlier Cretaceous horizon on the West Coast, and in, and even to the east of, the eastern range of the Cordillera System.

Turning now to the portion of the Cordillera region which intervenes between the above-mentioned widely separated localities, including that part of British Columbia to the south of the 56th parallel of latitude, we find there further evidence of the same great earlier Cretaceous formation.-The Iltasyouco beds (probably 10,000 feet in thickness) holding a fauna which was originally regarded as Jurassic, are now definitely referred to the Queen Charlotte Islands formation.<sup>†</sup> Further, the association of Aucella Mosquensis, var. concentrica, with the fossils of the last-mentioned formation in its typical locality, with the recent discovery by the writer of the same form, in great abundance, in beds of identical age in the northern part of Vancouver Island, leads Mr. Whiteaves to the belief that this species may be regarded as a characteristic one of the same general horizon. This view of the taxonomic value of the Aucella involves the conclusion that certain rocks in which it is the only abundant fossil, and for which provisional local names have been used in different parts of British Columbia, should likewise be regarded as representing inland extensions of the Queen Charlotte Islands formation, a conclusion in complete harmony with the stratigraphical and lithological evidence. The rocks referred to include the Tatlayoco Lake beds (7000 feet), Jackass Mountain beds (5000) and Skagit River beds (4400 or more) to which may be added (though as yet on little evidence other than lithological) the Nechacco series and the Cretaceous rocks known to hold coal on the upper part of the Skeena River. To the south, in the vicinity of the West Coast, this earlier Cretaceous formation is doubtless represented by certain members at least of the Shasta group of California and Oregon.

In connection with the Yukon Expedition, in 1887 and 1888, important new observations bearing on the extent of the earlier

\* Annual Report, Geol. Surv. Can., 1886, p. 17 D.

Forming, part 2, Contributions to Can. Paleontology.

۱

n

 $\mathbf{f}$ 

n

e

s,

e

le

m

of

sly

 $\mathbf{S0}$ 

ins

ar-

ely

 $\mathbf{nds}$ 

on)

had

ave

nich

and

east

Don-

and in

282.

 $\frac{1}{3}$  Mesocio Fossils, vol. i, p. 258.  $\frac{1}{3}$  A conclusion explained at length in the forthcoming publication by Mr. Whiteaves already referred to.

These rocks may be found described in the reports of the Geological Survey of Canada as follows: 1875-76, p. 253, 1876-77, p. 90, 1877-78, p. 105 B., 1879-80, p. 102 B.