## C. D. Walcott-Cambrian System of North America. 145

The Grand Cañon section is typical and includes with it the Cambrian section of Central Texas and Northern Wisconsin (see figures 5, 6).

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Crossing to the eastern side of the Continent, our next section (fig. 7, p. 148) of the Cambrian strata is taken in Northwestern Vermont, and its contained faunas serve to connect the distant Nevada sections and the group of Cambrian sections along the St. Lawrence, Champlain, and Hudson River Valleys.

At the base of the section a massive belt of limestone, 1,000 fect in thickness, carries in its upper portions the Olenellus fauna which, in the argillaceous shales capping the limestones, attains an extensive development. Continuing up in the section through the argillaceous shales, about 2,000 feet, masses



Fig. 5.—Section in Llano County, Texas, showing the relations of the Upper Cambrian (Potsdam) and the pre-Cambrian Llano Series.

of limestones are found interbedded in the shales, and in the limestone fossils that show the near approach of the Upper Cambrian or Potsdam fauna. The section gives the same succession of fauna as the sections of Nevada, where we find positive stratigraphic proof of the great difference in age of the Middle and Upper Cambrian faunas.

The Georgia, Vermont, section includes, in its vertical range, the sections about and below Troy, N. Y., in the Hudson River Valley, and those of Northwestern Newfoundland and the Straits of Belle Isle.

Directly east of the Adirondack Mountains of New York, the Potsdam sandstone is overlaid by a stratum of shaly arenaceous rock full of fucoidal, or annelid markings, and there the Chazy limestones appear resting on the latter.\* Tracing the sandstones south, a fine exposure is seen at Ausable Chasm, and continuing south a limestone is found coming in on top of the sandstone that, in Saratoga County, contains a well-marked fauna of twelve species, four of which are identical with species in the upper beds of the Wisconsin Potsdam sandstone. The calcareous layers of the Potsdam also occur at Whitehall, and Professor Dwight has found them near Poughkeepsie.

\* The unconformity, by non-deposition, noticed by Sir William Logan, is nowhere better illustrated than at this point, the Calciferous formation being absent from the section.