subsequently acquire one of them, and on a later occasion still another was secured from the same source. Because of these facts the Schoharie section has become a basis of reference in studying these faunas, and for 50 years past it has been a region freely visited by students of geology; and yet during all this time no geologic map of the area has been published except on a very small scale in conjunction with and as a part of the maps of the State as a whole. To meet a definite want on the part of students, and for the more detailed exposition of the geology of that region a map has been completed during the present season on the quadrangle scale which covers the area from Middleburg northward to the south line of Montgomery county. The work has been carried out by Prof. A. W. Grabau, who has previously labored with much credit on similar problems, and his map and report thereupon are presented in the following pages.

Structure of the disturbed fossiliferous rocks in the cement district about Rondout. The lucid and very interesting exposition of the geology of Becraft mountain which was given in my last report has led to a consideration of the rather more complicated region of rocks of like age on the opposite or west side of the Hudson river. Becraft mountain in Columbia county is the remotest outlier of the series of rock beds which so extensively enter into the composition of the Helderberg mountains of Albany county. At Kingston, Hudson and eastward these rocks were caught in the Appalachian folding, and subsequent erosion of these folds has isolated the area at Becraft mountain entirely from the parent mass. At Rondout and vicinity the rocks have been left in continuity, but it has long been recognized that they are exposed under much perplexity of form, due to the folding and displacement of the beds. The structural problems presented there have never been understood and as long as geologic work has been carried on in this State the situation in this region has been somewhat timorously approached. These problems seemed to afford features of much interest connected with the tectonics of the region and the mode of the Appalachian disturbances, and the fact was recognized that a solution would probably not be found