

thickness of magnesian limestones that pass, in their upper portions, into an arenaceous magnesian limestone that is overlaid by a belt of arenaceo-argillaceous shales, and this by a great thickness of a purer argillaceous shale that, high up, carries a brecciated limestone conglomerate and lenticular masses of sandstone and limestone, from the size of a bean to masses 2,000 feet in thickness and several miles in superficial area.

§ 13. A carefully measured section (fig. 1, page 16), beginning at the base of the westward-facing cliff overlooking the level that reaches to the shore of Lake Champlain, and extending southeastward through Parker's quarry, and a little south of Georgia post office, gives the following:

	Feet
1. Massive-bedded, bluish-gray dolomitic limestone with many inosculating threads and bunches of a yellowish-drab sandy limestone that weathers in relief .....	35
2. No. 1 passes into a steel-gray dolomitic limestone that weathers to a dark buff and bluish black, with angular fragments of bluish-gray limestone appearing irregularly at the surface. At 160 feet from the base the first band of mottled limestone, "Calico" or Winooski marble, is met with. The latter grades into a reddish dolomite free from mottling, and then in a gray limestone. (Fossils: <i>Hyalithellus</i> ?) .....	200
3. Gray dolomitic limestone in massive layers, some of which are mottled, reddish and white, but the larger part are gray and yellow. Many of the gray layers break up into a columnar structure, the columns being at right angles to the bedding. In a reddish-colored limestone, 200 feet from the base, a slender elongate tube occurs, probably <i>Hyalithellus micans</i> . .....	475
4. Reddish-pink dolomitic limestone weathering to a reddish brown and decomposing, on the exposed edges, to an arenaceous, dark, brownish-red rock that shows numerous fragments of fossils: <i>Kutorgina Labradorica</i> , <i>Obolella</i> (?) sp., <i>Salterella pulchella</i> (?), <i>Ptychoparia Adamsi</i> , <i>Olenellus Thompsoni</i> .....	100
5. Gray arenaceous limestone in rough massive layers, passing into more evenly bedded light-gray arenaceous limestone. Fossils similar to those in 4 occur in the lower portion .....	190
Total thickness of limestone .....	1,000
6. <i>Georgia shales</i> .—Argillaceous-micaceous and arenaceous shales containing numerous fossils at Parker's ledge and showing deposition contact on No. 5. Strike at Parker's quarry N. 30° E., dip 8° to 12° E. The fossiliferous shales at Parker's quarry contain: <i>Palvophycus incipiens</i> , <i>P. congregatus</i> , <i>Diplograptus</i> (?) <i>simplex</i> , <i>Climacograptus</i> (?) <i>Emmonsi</i> , <i>Kutorgina cingulata</i> , <i>Orthisina Orientalis</i> , <i>O. festinata</i> , <i>O. transversa</i> , <i>O. sp.</i> (?), <i>Microdiscus Parkeri</i> , <i>Mesonucis Vermontana</i> , <i>Olenellus Thompsoni</i> , <i>Olenoides Marconi</i> , <i>Bathynotus holopyga</i> , <i>Ptychoparia Adamsi</i> , <i>P. Vulcanus</i> , <i>Protypus Hitchcocki</i> , <i>P. senectus</i> , and <i>P. senectus</i> var. <i>parrulus</i> .	200
7. East of the Parker quarry the rocks are argillaceous shales with occasional layers of hard gray limestone, one-half of an inch to two inches thick, that carry numerous fragments of a linguloid shell.....	3,500
Strike of shales near top of 7 N. 40° to 60° E., dip 60° S. E.	
8. Light-gray quartzite .....	50