

dous detached cliff cut off by the action of the sea from the mainland, satisfactorily represents that portion of the limestone series to which in northern Gaspé the term *Grande Grève limestones* has been applied. This mass of reddish and yellowish limestones rising from the sea with sheer walls and vertical strata is profuse in interesting fossils, of which a large number were obtained, together with interesting series from the limestone exposures of earlier age. It is safe to say that the collections in the possession of the State Museum, both of the fossils at Percé and of those at Grande Grève, are without equal. In a subsequent part of this report I have added a brief preliminary account of the stratigraphy and paleontology of Percé.

Areal survey of the Elmira, Watkins, Ithaca and Waverly quadrangles. As reported last year operations were carried on during the season of 1902 in cooperation with the United States Geological Survey in an areal survey of the Elmira quadrangle. Under this arrangement as carried into practice in the Olean and Salamanca quadrangles stratigraphers were furnished for the field work from the corps of the survey and their expenses were met from the appropriations of this department, and we undertook at the same time to acquire the necessary paleontologic collections for proving the stratigraphic work. The stratigraphic work on the Olean and Salamanca sheets was chiefly done by Prof. L. C. Glenn, a skilful and exact observer, and the paleontologic collections therein were acquired and largely determined by Mr Charles Butts, representing this department. In my judgment the work of these two men was carefully executed, though leading to some divergence of conclusion with regard to classification.

The basis of this cooperation conceded to us the use for our publications of such maps and reports as the geologists of the United States Geological Survey should prepare, but we have found it impracticable to avail ourselves of this provision, first, for the reason that the scale of the United States Geological Survey folio maps is one we regard unsuited to our practice and, again, that the execution of these maps and reports was to