

TO ALFRED R. C. SELWYN, F.R.S., F.G.S.,

*Director of the Geological Survey of Canada.*

SIR,—The geological maps accompanying this report include an area of about 6,000 square miles, surveyed by us in southern New Brunswick up to 1878, assisted in 1877 and 1878 by Mr. Wallace Broad, B.A., and in 1877 by Mr. Frank Adams, B. Ap. Sc. Detailed reports on various portions of the area have already been published from time to time in the annual Reports of Progress, and the present report may be regarded as a *resumé* of these, with a general statement of the results of the work to date, especially in relation to the geological structure of the region. The difficulties presented over a large part of the area, from the wooded and unsettled character of the country, have rendered the working out of the detailed structure in many places almost an impossibility, and the authors wish it to be understood, that, while they believe the maps as now presented are in the main correct as to general features, some portions may be found, upon future and more detailed examination, to require amendment. Especially does this apply to the Silurian belt in western and northern Charlotte and its extension east into Queens and Kings, where lack of roads and good exposures, together with an entire absence of fossils, have rendered the assigning of this group to any definite horizon a very difficult matter; and for the present, although within the area there are rocks which possess, lithologically, many characters in common with the recognized pré-Cambrian as well as others of Silurian aspect, it has been thought best to assign them provisionally to the Cambro-Silurian as most in accordance with their apparent stratigraphical position. The outlines of the different formations have been carefully traced and their stratigraphical relations in most cases clearly made out. In addition to the geological, a large amount of necessary topographical work has been done. Surveys of roads have been made by odometer, chain and pacing throughout the whole of the counties of Sunbury, Queens, Kings, St. John and Albert, with portions also of Charlotte and Westmoreland, as well as many streams and coast sections. In addition to the working out of the general geology, special examinations have been made of the Grand Lake coal field in 1872-73; of the Albert and Beliveau mining areas (Albert shales) in 1876; of the copper mines