

second to that of no other colony or nation in the civilized world. This enormous and sudden increase in the work thrown upon the Survey necessitated an almost complete change not only in methods but a very considerable change in the personnel of the staff itself; an amount of work, in fact, which can scarcely be estimated by anyone without careful study and comparison with similar work done in this branch of science by other countries. For while the importance of a systematic geological survey has for many years been recognized by all nations and regarded as a very considerable factor in connection with the national progress and development, the areas embraced in the several countries in which such surveys have been carried on are, for the most part, of very limited extent as compared with the great stretch of country called Canada, and the entering upon the geological study of half a continent by so comparatively young a nation may well be regarded as one of the greatest and most important events in the history of the science.

Probably one of the most elaborately conducted surveys in recent times is that of the British Islands, in which we have an area embraced in the three divisions of England, Ireland and Scotland, scarcely two-thirds the extent of the Province of Quebec alone; densely populated and so arranged that the work of the geologist was facilitated to the utmost degree by the open character of the whole country and by the presence of the most carefully constructed large scale maps possible to be obtained; yet for more than half a century the combined skill of the geologists of England, Scotland and Ireland, aided by the most recent improvements in instruments and in appliances for conducting all necessary examinations, and by a financial backing sufficient to meet every requirement, has been devoted to the determination of their geological structure and mineral resources. Even the great Geological Survey of India, which, with the exception of the United States and Canada, is probably on the most extensive scale of any in the world, embraces in the whole Indian Empire an area of only one and a half million square miles, while the gigantic colony of Australia, even were the confederation there complete, would still in the whole island fail to approach the area embraced in the Survey's operations in Canada by half a million of square miles. In point of fact we here in Canada