

in certain fields for the Survey as he did some years ago. If we could but feel that as the field workers bring in material it would be studied at an early date by the palaeontologists of the Survey, so far as it might come in the line of their studies, and that the rest of the material would be submitted to other palaeontologists, who are experts in the particular subjects, a new day would dawn for us, but without money this is impossible. I have not alluded to the particular explorations of those who worked in the field under the directorship of Dr. Selwyn and of his successor, Dr. Dawson, and of their fellow-workers in the laboratory and study. It would be impossible to mention the names of all or to make a selection, but we can well afford to thank the few who are left in the field, Messrs. McConnell, Bell, Ellis, Fletcher, Low, Macoun, and others, for their devotion.

In 1867, the year in which the Dominion Government took charge of our survey, the United States inaugurated the first regular survey under the Department of the Interior. It was called the "Geological and Geographical Survey of the Territories," and was under the charge of Dr. F. V. Hayden, until it was superseded in 1880 by what is called the "United States Geological Survey." A comparison of the publications of these two surveys alone with those of Canada during the same period, would be unfair to the United States, because we thus overlook the publications of the Smithsonian Institution, the United States National Museum, and other departments at Washington, but the result is overwhelming enough. We must also bear steadily in mind the fact that while these publications were being produced, twenty-five or thirty States were also actively at work, while the Provinces of Canada were doing practically nothing. During Hayden's Survey, 1867-1879, annual reports were issued somewhat similar to ours in size and character, but there were also five volumes of bulletins, containing upwards of 150 papers, thirteen miscellaneous, and fifteen unclassified publications, about seventy-five maps, and thirteen final reports or monographs. The monographs were splendid quartos, liberally supplied with plates and other illustrations, and illustrating and describing vertebrate and invertebrate fossils, including fossil insects, also fossil flora, and existing forms of rodents, acridians, rhizopods, etc., all from the far West. The present survey has published nineteen annual reports. The last report will include, apparently, six parts, and some of the parts cover two volumes. I wish it were possible to explain here the scope of this one annual report. Of bulletins about 150 had been published down to 1897, and of papers on water supply and irrigation, ten. Of monographs, of the same character as those under Hayden's Survey, thirty-four. Of maps, statistical papers, etc., there has been also a liberal supply.

The operations of our Survey for the year ending June 30th, 1897, cost \$117,000. For the nearest year in the United States the cost was \$1,034,000. Our usual basis of comparison is population, and measured thus we spend the most, but clearly, that is not the measure for this particular item of national expense. The real basis of comparison between the United States and Canada of expenditure for survey and topographic purposes, should be the respective areas of unexplored or insufficiently explored territory. Judged thus, Canada should be spending much more than the United States, and we must not forget that in comparing the \$117,000 spent by Canada with the \$1,034,000 spent by the Federal Government of the United States, we leave out the large expenditure by the various States carrying on surveys on their own account. I am quite sure that on mere topographic work we should spend more than the United States, but I am aware that we think at all events that we cannot afford to spend so much, and I would not spoil a good cause by asking for what will certainly not be granted. But looking at matters in the hard light of politics, and gauging the possibilities in Canada by other countries not more able to spend, I am quite sure that at least \$250,000 annually should be appropriated for our geological and natural history survey. And in addition to this, the Provinces should each spend at least \$10,000 annually and carry on their work in concert with the Dominion Survey, so that in all respects there would be united effort and no unnecessary duplication of work. Perhaps some of the Maritime Provinces would think \$10,000 too high, and a smaller sum might suffice, but for Quebec, Ontario and British Columbia with their vast areas, the sum suggested is very small. That the people would find the expenditure a good investment in dollars and cents I am certain, quite as good an