

have so acquired the habit of looking upon such immense areas as of every day occurrence, that an initial journey of three or four thousand miles to begin operations is regarded with no greater feeling of excitement or uneasiness than one of a tenth that distance in a much smaller country. In Australia, however, the work of the geological surveys has been comparatively local, and has never been applied to the enormous areas with which we are familiar in this country. The only survey, then which in point of extent can at all compare with that of Canada is that of our gigantic neighbour to the south, where the area of surface to be covered by its operations is not very different from our own, but where certain conditions exist which render a comparison of the work of the two surveys interesting from several standpoints. Thus, in the United States, owing to their more southerly position, field parties are enabled to spend a very much longer period in exploration than in Canada; in fact there is no reason why their field work cannot, in many portions, be carried on throughout the entire year. In Canada, on the other hand, owing to an early and often excessive snowfall, and to the extreme cold of winter, the period in which field operations can be carried on with profit in some years scarcely exceeds a third of the whole time. Then again, in many of the American states local or state geological surveys are, or have been, carried on, by which the structure and mineral resources of each have been investigated by the state authorities and at the state's expense, and thus the work of the general survey has been greatly facilitated. It is true, in the earlier days, before the confederation of our own provinces, local surveys were carried on, to a limited extent only, in Nova Scotia, New Brunswick and Prince Edward Island, but the amount of time and money expended in these was comparatively insignificant, although the work done by the local geologists was of very considerable value; while in the provinces of Ontario and Quebec, which have enjoyed legislative union for half a century, the work was done by the Geological Survey of Canada with a very limited staff indeed, for years scarcely exceeding in number more than half a dozen persons in all. Contrasting also the facilities for work of the British surveyors, and to a certain extent of the Americans as well, with the difficulties which the members of the Canadian staff have to encounter, the unfavourable position of the latter becomes most striking