

cing upon the shoulders of one man the work of half a dozen, the American Survey has this subject so arranged that to one person is entrusted the division of the vertebrates as distinct from the invertebrates, the latter also being divided into the Paleozoic or ancient and Cenozoic or recent divisions, while in the case of fossil plants, fishes and insects, these are for the most part assigned to specialists in each of these branches, and in this way the very highest results are attained in each subject.

The division of geography or topographic work is one of the most important of the whole. Finding, as in Canada, the exceeding difficulty of doing accurate geological work without a good ground plan or map on which the observations made can be systematically recorded this division has been organized to meet the required want. This work employs nearly one hundred persons alone in the scientific work relating to the making and arrangement of the surveys, including ten draughtsmen, but the very great utility derived from having good and reliable maps of the country ready to hand for the work of the geological staff proper is such that whatever extra expense is incurred in their construction is amply repaid. Of course, in the comparison of countries like the United States and Canada, the conditions of which are alike principally as regards area, while the one has already an enormous development of wealth and population and the other an immense territory and a scattered population, such comparison appears to place Canada in a very unfavourable aspect unless the diverse conditions are thoroughly comprehended.

Although the work of the Geological Survey of Canada has been going steadily forward for almost half a century, it is surprising how few persons really understand what is the legitimate scope of the labours undertaken by its staff or in what direction the field work should actually extend. Thus many persons apparently have the impression that one part at least of its duties should be the examination of every locality where minerals may be fancied to exist by any person who may indulge the often foolish notion that there should be unlimited wealth in the rocks which may constitute a large part of his real estate. Such persons entertain the idea that not only should surface indications be carefully explored for their own particular benefit, but that even excavations, shafts or bore-holes should be put down, and in fact that