THE DOMINION FOREST RESERVES IN THE DRY BELT IN BRITISH COLUMBIA.

By Roland D. Craig, F.E., Inspector of Forest Reserves.

The Hat Creek, Tranquille, Long Lake, Niskonlith, Martin Mt., and Monte Hills Forest reserves, form a group which resemble each other in situation, purpose and sylvicultural characteristics. Situated in what has been known as the "Dry Belt," but what should be called the "Irrigable Belt," the chief function of these reserves is to protect the watersheds from which flow the streams which are turning a land resembling the Majara Desert into a region of fruitful valleys. The great possibilities of these fertile valleys when watered, are just beginning to be appreciated, and anything which assists irrigation cannot easily be over-valued.

Heretofore the cattle industry has been the chief source of revenue to this district, but the large ranges required in this region of scant vegetation has made it not the most profitable business, and over-stocking has resulted in serious deterioration of the grazing possibilities. It has been demonstrated, however, that by irrigation \$300 to \$500 per acre per annum can be secured in fruit, and now settlers are pouring into the valleys with the intention of entering this profitable business. The profit nd permanence of this industry is, however, directly dependent on the preservation of the forests on the mountains surrounding the valleys, for in the valleys there is very little precipitation, only 2 inches falling last year in Kamloops, and irrigation must be depended upon. At higher altitudes the precipitation, both in snow and rain, greatly increases, and if protected and controlled there is an ample supply of water for the land which is available for agriculture.

The value of a forest cover for catchment basins is often not fully appreciated. Dams and reservoirs may assist in controlling the run-off, but they are expensive and often unnecessary, and besides they do not protect the water from evaporation, which is one of the chief sources of loss. The forests not only retard the run-off, but prevent a large part of the loss by evaporation by excluding sun and wind. In that region too, where much of the water comes in the form of mists, which are blown along the mountain tops, the increased surface afforded by the forests arrests much of the moisture which would otherwise be lost. Persons travell-