

resource. Once embarked on a wrong principle of taxation, there is no limit to the suicidal injuries which the province of British Columbia may inflict upon itself. Heavy taxes we must have and heavy taxes we must cheerfully pay out of the great resources of the land. But we cannot afford to perform surgical operations upon the domestic fowl which lays the golden egg for the purpose of enhancing our revenue.

MINING MEN OF THE PROVINCE.

MR. JOHN R. GIFFORD, manager of the Hall Mines at Nelson, was born about 50 years ago near Tavistock, Devon, England. At an early age he went to Spain for Messrs. J. Taylor & Sons, assuming charge of iron mines in Asturias and quicksilver mines in Aragon. In 1875 he was sent to Mexico to take charge of La Ley and St. Rosalia copper mines, which were afterwards sold to the Rothschilds and are now known as the Boleo. Later on he became manager of the celebrated old silver mines Rosario in Linaloa, Mexico. Mr. Gifford was also on the Comstock and Bodie in its palmy days and had charge of a number of properties both in California and Nevada. He then spent two years exploring for a California syndicate the mountain ranges of Southern Nevada and Arizona. Ill health, the result of exposure, however, compelled him to temporarily give up active professional work, but later he devoted much of his time to examining and reporting on mining properties in Colorado, Nevada and Canada. In 1899 he resigned the position of general manager of the Ontario Boulder Gold Mining Co. to take charge of the Silver King mine, at Nelson, B.C., and after the re-construction of the Hall Mines, Ltd., he was given the management of all the mining properties owned by the Hall Mining and Smelting Co.

ECONOMIC GEOLOGY IN THE SIMILKAMEEN DISTRICT.

(By W. J. Waterman, M.E.)

THE study of geology from an economic standpoint is becoming more universal, so much so that some of the large mining companies, such as the Anaconda, Calumet and Hecla, etc., find it pays them to employ a geologist as such in the same way they

employ an engineer or an assayer. The days when the cry was "Gold is where you find it," have to some extent gone by as although the aphorism is as true as ever its application can be much amplified by a certain amount of geological knowledge. The truth of the old adage, "A little knowledge is a dangerous thing" being, however, nowhere more pertinently applicable than in the case of mining. A large proportion of the papers in the transactions of the mining associations of the world are on the genesis or enrichment of ore bodies and veins and monographs on these and allied subjects are being published every day.

The mining district of which I am writing includes



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the watersheds of the Tulameen and Similkameen Rivers, and is tributary to Princeton, which is situated at the junction of these two streams. Both to the amateur geologist and professional miner it is an exceptionally interesting one. It includes most of the formations represented in British Columbia and the variety of its minerals of economic importance within a comparatively small radius would be difficult to beat anywhere. Roughly speaking it may be represented as consisting of many ancient and modern (from a geological standpoint as to time) valleys or lake basins now filled with tertiary measures either of sandstone, coal, fire-clay, etc., or of later volcanic rocks covering these deposits in part, and these valleys having been eroded from the older crystalline rocks which form the ancient floor. The accompanying plan and section will to some extent illustrate this although the smallness of

the scale on which it is necessary to draw and the want of accurate surface surveys render it difficult to make the point very clear. It will be noticed that the mineral areas are indicated by minerals and each district will be briefly dealt with in rotation.

No. 1. This consists of a narrow belt of black slates with impure limestone, probably a continuation of the section exposed on the Hope trail 25 miles from Hope and which is there heavily mineralized with iron oxides, sulphides, etc. At the headwaters of the Tulameen River, however, the mineralizations consist of lead sulphide and galena ores with some chalcopryrite and blende. Assays have in many cases been high in silver and up to 100 ounces and 65 per cent lead. The blende is sometimes too high for free smelting. Pyrr-