Prospecting for Gold and Silver.

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"ancient line of structure, or through new fissures piled up chains "of volcanoes conforming in trend with the general north and "south plan.

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"Over these mountains are found localities of the precious "metals, and it is not surprising to observe that, following its "leading structural idea, they appear to arrange themselves in "parallel longitudinal zones.

1. "The Pacific coast ranges on the West carry quicksilver, tin, "and chromic iron.

2. "The next belt is that of the Sierra Nevada and Oregon "Cascades, which upon their west slope bear two zones; a foot-hill "chain of copper mines, and a middle line of gold deposits. These "gold veins and the resultant placer mines extend far into British "Columbia and Alaska.

3. "Lying to the east of this zone, along the east base of the "Sierras, and stretching southward into Mexico, is a chain of "silver mines containing comparatively little base metal, and fre-"quently included in Volcanic rocks.

4. "Through Middle Mexico, Arizona, Middle Nevada and "Central Idaho, is another line of silver mines, mineralized with "complicated association of the base metals, and more occurring "in older rocks.

5. "Through New Mexico, Utah, and Western Montana lies "another zone of argentiferous galena lodes.

6. "To the east again the New Mexico, Wyoming and Montana "gold belt is an extremely well defined and continuous chain of "deposits."

From this it can be seen how any information relating to the geological structure, and rock formations of a district, or the character of its ores, will assist in determining what may be expected at other points, in similar respective positions, on the same range. As an illustration of this, I may mention the fact that on the Selkirk Range, in Kootenay District, B.C., large and valuable lodes of silver-bearing lead and copper, associated with other base metals, have lately been discovered. The ores of this district correspond in character with those of Idaho and Western Montana, immediately south and on the same range, and with those of mineral zones 4 and 5.

It being a fact that nearly all the valuable gold-bearing veins of the world have been found in metamorphic slates and schists of different ages, from the Silurian in Australia to the Jurassic in California; it is more resonable, and one is more likely to prove

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