

often in streaks. Typical of this series are the Rainbow, Wavertree, Evening Star No. 9, Golden West, and others. The Howard Fraction is reported to have the same strike with a northerly dip.

Another type the author has not examined is represented to the east of Republic Mountain by the Myrtle Group, where a vein occurs traversing also the Rainbow, I. X. L. and Morning Star on Springer Creek. The strike is reported N 10° E and S 10° W with dip west, and the ore is high grade in silver values. Farther east we come to the type of small high-grade veins represented by the Enterprise, Bondholder, Mabou, Missing Link, Premier and Evening Star No. 8. These veins traverse the country for six miles with average strike N 28° E and S 28° W, and dip east, carrying high silver values, but no gold to speak of.

This Enterprise series intersects the Republic series apparently on the Premier and Evening Star No. 8 groups, near Dayton Creek.

Intersecting the Enterprise series again is another series, viz.: the Arlington one. Here we have large veins striking N 10° E and S 10° W with dip east contrary to the Myrtle type.

This series is represented by the Arlington, Speculator, Mabou, Neepawa, Enterprise, Bondholder and others with parallel veins. These have streaks of pay ore like the Republic series, carry gold and silver values, represent large tonnage, and require economical treatment.

There is much more yet to be found out about the characteristics of the dry ore series in question. Though some development has been accomplished, a large amount more is still desirable, executed by skilled engineers who realise what they are learning, and who form their judgment from facts before them, sifting out fact from theory. This curt account of the series, however, is given in the hope of obtaining others' ideas.

Next has to be considered the mode of occurrence and constituents of the pay ore. Where gold occurs, as a rule it is not free, but alloyed or mechanically mixed with iron pyrites, a long disputed difference. The silver is sometimes alloyed with galena, zinc-blende, copper sulphide, or antimony sulphide, not in masses but dispersed through quartz gangue. At other times the silver is native, or as