

POINTERS ON PROSPECTING.

Requires Both Scientific Knowledge and Experience.

The genesis of development of a mineral region begins with that indispensable toiler, the prospector; the "Aladdin," the steel of whose pick strikes the spark that lights the lamp of discovery and reveals the numerous goldcoffers that are pouring out their wealth of precious metals.

Much sympathetic truth has been written of the perseverance and endurance of this hardy individual, and the meagre results that so often follow his efforts with their attendant privations and hardships. In the days ago, of "the wild and woolly west," adventure added a spice to his search for treasure. The live prospector of today is a man of milder mien. He has not stood still while the world progressed, but has kept step with the pace in evolution. He is no longer a mere digger in the ground, but an observer of things. He is a reader of rocks which tell so much of probable mineral values. He knows something of geology and mineralogy; can point out the sedimentaries that are unaltered; knows something of the periods to which they belong; can distinguish between slate and shale; between calcite and quartz, quartz and feldspar; segregates porphyries and knows their value in connection with ore bodies. He knows something of metamorphism; that quartzite is altered sandstone; that the great mass of rocks are chiefly altered sedimentaries, and that valuable metals are usually found in regions of intrusive rocks.

He is no longer exclusively searching for quartz as the "mother of gold," nor for granites, slates and serpentines as the only formations favorable to valuable ore bodies. He has learned that it is not kinds of rock, but conditions which have prevailed in the making or changing of rocks, elemental and physical, that has produced the coveted mineral. He also knows, or should, the characteristic, color, streak and hardness of all ores of commercial value. The up-to-date prospector has need of a wider knowledge than his predecessor. Values are found where unthought of before. Modern methods of reduction make the handling of extremely low grade ores profitable.

It is often asserted that tenderfeet have discovered most of our valuable mines. This is like the man who believes bad luck will follow a horse trade on Sunday. If it does, he makes particular note of it, because he expects it; while unimportant, that which comes of trades made on other days, passes unnoticed. The "tenderfoot's" find attracts attention because it is supposed he is not apt to find a mine.

This supposition is proof that his chances are not equal to the man of experience. There is no valid reason why technical knowledge is not just as valuable in prospecting as in any other calling. The prospector who lacks it may pass a bonanza by, sell it for a song, or spend time and money holding a worthless piece of ground. To be expert in reading surface indications, it is essential to know something of the how, why and probable where.

The purely technical is not sufficient. The student must get over the ground, and into it; must come into contact with things both visual and physical, though it be rocks. This is the practical that puts a finish on mental effort; the combination that produces a man fit for the field. A man need not be a graduate of some school of mines to be all that is

here pointed out, and more. The world is full of books from able men and the book of nature is open to all. The prospector will always be with us. Capital will not take to the burro and pack saddle and the roughness of camp life on desert and mountain. The discoverer, too often, meets disappointment when his reward may lie at his feet. For lack of funds he is unable to exploit his find. His time is lost and a valuable ore body lies undeveloped. This break should be bridged, or rather prevented by a union of capital with the prospector's time and experience. At the discovery stake, knowledge is in the main a bankrupt. Not a penny for development and capital fights shy. There are no drifts, crosscuts and upraises with calculable tons in sight, nor assayers' certificates attesting the value en masse. Capital and labor are interdependent.

Combination is conservation of time and money. Applied to mining, it would result in more rapid development of our mineral resources and reduce the percentage of failures. As pointed out, the prospector expends time and what little money he has, only to fail at the location post through lack of funds. Again, capital too often fails through misdirected effort and lack of knowing how at the working end. Capital is not meant here as millions; a few hundred, wisely expended, may bring rich returns.

In a mining region the majority are interested in mines. Some invest in a few shares because they are told it is a good buy; or what is more, risky speculation in stocks. A better way to mine would be to form an association to keep an intelligent, well versed, thoroughly practical man in the field. Give him an interest and a salary that will leave his mind free from the shadow of want. The chances of realization would be far greater than in speculation.

Mineral exploration and development, judiciously conducted along these lines, will result in fewer failures than is accredited by commercial agencies to transactions in the business world.—J. L. Mallery in Salt Lake Mining Review.

"Now is the Appointed Time."

The O. R. & N. Co. has just issued a handsomely illustrated pamphlet entitled, "Oregon, Washington and Idaho and their resources." People in the east are anxious for information about the Pacific northwest. If you will give the O. R. & N. company agent at Baker City a list of names of eastern people, who are likely to be interested, the booklet will be mailed free to such persons. Yours truly, A. L. Craig, General Passenger Agent.

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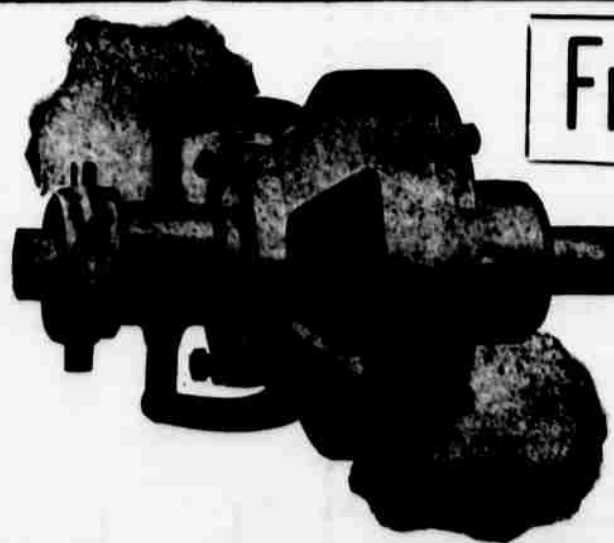
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