

is bad management. It is undoubtedly true that many good mines have been ruined, or, at any rate, temporarily shut down by reason of bad management, but a really good mine will stand considerable bad management. It is the poor mines which will not pay under any management that are grossly mismanaged and large sums of money extravagantly expended.—*Canadian Mining Gazette*.

The Profits of Mining.

The Witwatersrand in the Transvaal in 1887 produced only \$405,000 in gold; in 1896 the product was about \$44,000,000. In eleven years it was over \$240,000,000.

The Comstock lode of Virginia City, Nev., in the past 20 years has produced \$320,000,000 of gold and silver; the gold production was only \$8 per ton of ore.

The Calumet and Hecla, south shore of Lake Superior, up to March, 1899, paid \$60,850,000 on a capitalization of \$2,500,000.

The Alaska-Treadwell, a mine with ore valued at less than \$3 per ton, generally much less than that, and not to be compared in extent and value with the properties on the Hammond Reef in Northwestern Ontario, paid up to April, 1899, \$4,070,000 in dividends.

The Ontario, Utah, up to November, 1897, paid \$13,557,500 in dividends, and the Mollie Gibson, up to a recent date, \$5,000,000.

The Homestake of South Dakota has received from its shareholders only \$200,000, and, though not equal in extent or richness to some of the low-grade properties in Northwestern Ontario, paid up to April, 1899, \$7,431,250.

These are but a very few instances of the enormous profits of mining in regions where generally the conditions are less favorable than in the new gold fields of Ontario.

Panning Gold.

A. W. Robinson contributes an interesting article to Cassier's Magazine for May, in which he describes the process of panning gold. He explains that the primitive mode of hand washing is by the pan—a shallow dish of sheet steel, about eighteen inches across and three inches deep, with a flat bottom and flaring sides. The much-used expression, "pan out," has its origin in the early gold mining days when, after washing down to the last fine particles, the results in the pan were eagerly looked for. Inasmuch as there are about a hundred pans to the cubic yard, it will be seen that a penny's worth of gold to the pan would be valuable ground when worked by modern wholesale methods. Panning gold is a rapid and simple operation to an experienced miner, but to the novice it is slow and laborious. By a few gyratory movements with the lip of the pan under water the bulk of the gravel is quickly washed over the edge of the pan, while the gold settles to the bottom. The process is then continued, with repeated lappings of the water carrying off a little sand and gravel each time until there remains only a small quantity of the heavy magnetic black sand always found in gold-bearing gravel. In this sand the occasional gleam of a golden "color" is seen, and then comes the interesting and delicate part of the opera-