argentite (sulphide of silver), and in a few cases apparently chloride (horn silver). In all cases there are base metallic values with the precious metals in the gangue of the veins.

Now comes the crux of the whole matter. Nature has put the minerals in the veins with lavish hand to be extracted by the ingenuity of man.

The ores having been wrought, how are they to be treated on a commercial scale to secure an extraction of at least ninety per cent. of the values, and also bring the profits to the shareholders?

At present profits are given away to such vampires as railways and custom smelters, who suck the life-blood out of the mining industry, by exorbitant overcharges, though bonused by the country, just when expenditure of working capital promises success. If possible, any transportation expenses from the mine to the railway, and so to the smelters, must he saved on an average grade of ore; therefore, what is wanted is a process to treat the ore at the mine.

The present general teaming charges are $3 per ton. Freight and treatment on railway and at smelter are charged from $8 to $12 on dry ores (cheap compared with the wet ore charges), the two vampires do not make separate contracts for each division of labor, but combine against the hapless mines. Put mining charges on to the above cost, then masses of $12.00 ore are useless to the mine owners. Under present circumstances hand sorting is resorted to, or in other words, the eyes of the mine are picked out, leaving a lower second grade class of ore than if the mass was shipped. The owners fondly hope that in some dim future the vampires will lower their charges to allow this second grade ore to be shipped, but will they?

Another kind of sorting is introdued, viz.: Wet concentration by roll crushing and jigs with settling tanks for the silver slimes.

This reckless method, as proved in all mining districts where this class of ore occurs, may save seventy (70) per cent. of the values, hopelessly losing for all time the balance.

This is only picking out the eyes of the mine in another way, for the silver as argentite, antimonial, etc., will not settle effectually enough to permit its recovery. These facts all show that the mine to pay as its