

why on earth—but if I continue I shall grow profane." There are, meanwhile, some very marvellous rumours concerning the manner in which work at the "Tangier" has been conducted during the past few months, and our correspondent endorses, as being in the main correct, the following report from the *Revelstoke Herald*:

"The shut-down of the Tangier mine at Albert Canyon, which has been working 25 or 30 men all summer was announced in our issue of Wednesday last. Since then something has been learned about the methods employed in opening up this property, which, to say the least, appear to have been very ill-advised and have in consequence produced results far from satisfactory. Less than a year ago shaft sinking was started on the property and a hole sunk below the creek level about 60 or 65 feet. Enough timber to make 100 feet was built on top of this (the timber part being filled around with waste) and the shaft celled 100 feet underground. Levels to the extent of 800 or 900 feet were run in all directions from the bottom of this pit and \$15,000 or \$20,000 spent without any results. Gopher holing at the grass roots is hardly the way to make a mine, and intelligent miners who are familiar with the situation at the Tangier are at a loss to understand why a considerable portion of the large expenditure already made was not spent in sinking instead of useless work, which leaves the company, as far as a mine is concerned, in practically the same position as when it commenced operations. The Tangier Company, so its miners state, is a good outfit, and intend to do what is right, but it appears to be like so many other English mining companies, the victim of mismanagement in the practical work of development. However, it is to be hoped that the company will not be discouraged to the quitting point by the unsatisfactory showing of the past year's work, but will resume operations in the near future with some one at the head of affairs at the mine who can properly develop the property."

The career of the concern from its inception to date should afford a salutary object-lesson to British investors. It afforded a typical instance of a mining company floated on the strength of the very largest assurances, and a lavish use of promotion money and the names of titled and other directors of social standing, who, for the best part, knew nothing whatever of mining or business management.

The I. X. L. mine at Rossland presents the curious spectacle of a property which is free milling and which has a ten-stamp mill within 1,000 feet of the ore bins, shipping ore to a smelter instead of milling and amalgamating on the spot. The reason is not far to seek. Upon ore of the grade of the I. X. L. the percentage loss in milling amounts to a higher sum than the amount charged for freight and treatment by the smelter which pays the miner 95 per cent. of the gold and silver value of his ore. This is an instructive object lesson in the progress made in smelting. Not so very long ago a free milling ore was the most sought for and retained the highest profits, grade for grade. Nowadays there is nothing to pick and choose between a free milling and base ore, except that if the base ore contains elements favourable for fluxing the advantage lies with the base ore.

Whether the Columbia-Kootenay is a mine or not is a question often discussed in Rossland. There is a

volume of hearsay evidence repeated "from a man who was working there," or "from a man who was told by the superintendent at such and such a time," and so forth, to the effect that in its immense ore bodies values only occur in spots, and that the general average is too low to pay. Against this must be set the fact that exactly the same thing was said about the Le Roi during 1895 and 1896, and also about the Centre Star from 1892 to the present day, and that these mines are to-day cheerfully productive. The Columbia-Kootenay has also been recently thoroughly tested by Mr. Collins, and a scheme of development outlined which no mining engineer would undertake without enough ore in sight to justify it.

The Le Roi Company has announced that it is about to ship its dump of second-class ore, which contains 120,000 tons of rock. Fortunately for next year's record this enormous shipment will not all come into this year's figures; but enough of it may to send the tonnage up to 200,000 tons for 1899. This dump is not being added to much at present, because the grade of ore previously stored on it now goes straight to the smelter. It will be remembered that under the old management experiments were entered into at the O.K. mill upon samples of this dump and it averaged about 8 dwt., of which a considerable proportion was saved on the plates, and it was freely stated at the time that the company intended to erect a stamp mill at the mine. This was not done, however, probably because the present improvement in smelting rates was foreseen by the men that have brought it about. There will very likely be further alarmist rumours as to the decrease of the grade of Le Roi ore when this shipment swells the tonnage, on the part of those who read the signs of the times upside down.

The Le Roi returns for the first half of September give a gross return from all values of just an inappreciable fraction over \$12 a ton. When it is considered that this allows the mine the full commercial value of the copper in the ore, it is evident that this is ore which would barely be profitable to a mine not operating its own smelter and not working on a large scale. But it is profitable and very handsomely so. The fact is that the ore in the Le Roi is just as rich as it ever was, but the economies effected in treatment have been so great that the Le Roi is able to make a profit now on ore which was previously waste from a commercial point of view. There is an excellent dividend for the shareholders lying already mined in the second-class dump just as soon as the smelter is enlarged sufficiently to treat it. Meanwhile the mine, instead of having its rich spots gouged out for the purpose of sensational returns is making profits on ore left standing before and storing up a vast accumulation of "ore in sight" of a higher average grade than that which is now being worked satisfactorily. To any conservative investor this should present a very satisfactory state of affairs. But if it is satisfactory from the point of view of the Le Roi shareholders how much more so from the point of view of the owners of other mines. Ore is now of commercial value which even two years ago was of no account whatever, and this fact has already given a great stimulus to production and development round Rossland.

There is a very persistent impression among the