

Fenton's charge, extending from Westport and Denniston to Reefton and Lyell, something like two hundred and fifty men have seen the process for assaying gold- and silver-bearing stone; and probably about one hundred and fifty men in that district could now be intrusted to conduct accurately such assay for themselves. I do not know that more than two hundred men in Mr. McLymont's district—Greymouth to Ross—have seen assaying fairly carried out; and of these probably a hundred miners could do it themselves. I am not in a position to know what has been done in the Thames School of Mines in the way of teaching the process for assaying stone; but I know that on my visit to that district, two years ago, four hundred men had seen Mr. Fenton's process; and, had the schools at Coromandel, Karangahake, Te Aroha, and Waiorongomai, been carried on according to my programme, we should have four hundred men there now who could assay stone for gold and silver, lead, tin, and antimony by the fire process with perfect success. In Otago I should say that four hundred men have seen the process, and, of these, that one hundred and fifty men could carry it out. Much progress has been made in teaching the chemistry of gold-saving agents, such as chlorine, the various acids, sodium amalgam, and several salts; the use of these, and their mode of application; also in the roasting of ores, and the easier methods of testing minerals by the wet processes and the blowpipe.

The schools have now arrived at the stage when more rapid progress would be expected, for the two following reasons: (1.) Their lecture-rooms and laboratories are now rapidly getting fitted up with the necessary teaching-plant. Indeed, it is only within the last few months that the schools at Denniston, Westport, Boatman's, Greymouth, and Kumara got suitable buildings for themselves. (2.) The studies of the classes hitherto have only prepared the miners and older schoolboys for entering on the more important and advanced and practically-useful subjects of testing and assaying complex minerals for the metals they contain. Among the advantages which many hundreds of the miners have derived from these schools I must also mention the practical information they have received on every goldfield about the methods of removing the gold from old copper-plates, and of extracting it from the old iron retorts which have been long used for retorting amalgam; also the cupellation process of cleaning, by means of bone-ash and lead, the dirty gold which is otherwise not saleable. The attention drawn to the fact that at Reefton and other quartz-mining districts much gold goes away in the tailings—often up to 1oz. per ton—is the first step in bringing about improved means of getting better returns, especially when the mine- and battery-managers are themselves becoming experts in the testing of such tailings. The teaching of a thousand miners how to identify such valuable minerals as scheelite, chrome-ore, and the black oxide of manganese must also be placed to the credit of the schools.

The best feature in Mr. Montgomery's last report to the Minister of Mines is that at the Thames School of Mines he has about a hundred and twenty schoolboys attending his chemistry and testing and blow-pipe classes. I know Mr. Fenton has also a considerable number of boys from twelve to sixteen years of age in his assaying and blow-pipe classes, and I can testify that these boys can, as the results of Mr. Fenton's teaching, assay quartz or iron-pyrites with great accuracy. I do not know how far Mr. McLymont carried out my instructions to form classes, wherever he was, of the same kind. In Otago such classes made great progress under Messrs. Harman and Goodlet at Riverton, Waipori, Lawrence, Bannockburn, and Naseby; and I consider these boys' classes an excellent feature of the schools.

*Number of Members enrolled in the Classes.*—I regret that I am not in possession of full information on this subject. But the benefits of the instruction given at the schools are not confined to the enrolled members, because the classes are, in most cases, open to and attended by some miners who are not on the rolls; and, indeed, during my own visits all my lectures and testing-classes are attended by large crowds of miners, the attendance on these occasions ranging between 60 and 250—giving for the West Coast and Nelson an average of about 120 and for Otago an average of 70 at each meeting. It must, however, be confessed that, although a good deal of useful information, which can in many cases be turned to good account, is given in these lectures of mine, yet their main object is to draw attention to the benefits that can be derived by a course of study in the practical classes that are carried on during the longer periods by my assistants. It is therefore by the attendance at these practical classes that are held during my absence that the success of the schools must be judged, and I regret that I have not got accurate information to give your Committee. I have, however, ventured to state in Table A of this report the average number of the members enrolled in each school on the West Coast and in Otago for the last two years. The numbers fluctuate a good deal from time to time. I have taken them chiefly from reports of the presidents of the schools to myself, and partly from information from the instructors—Messrs. McLymont, Fenton, Harman, and Goodlet; at the same time I must observe that three circumstances have all along militated against large numbers in several of the West Coast schools—namely (1.) The want of lecture- and class-rooms at the important centres of Kumara, Denniston, Greymouth, Boatman's, and Westport. These wants, I am glad to inform your Committee, have now been supplied in a most satisfactory way. (2.) The failure of Mr. McLymont to make himself acceptable to the general body of miners, and especially to the schools of mines committees and members in the important centres of Rimu and Stafford, and only partially in Kumara and Greymouth: he explains his partial failure in the last two cases by the circumstance that they had not in these places any suitable accommodation for classes; and (3.) The uncertainty in the minds of the miners about the continued support of these schools by Government subsidy. I am not sure that there is much in this last reason, although it will go far to annihilate any local efforts now that Government has suddenly withdrawn their support. The year's term in most of these schools is in the present month; and the result of the discontinuance of Government support will simply paralyse all efforts to keep these schools alive. From Table A, above referred to, the number of enrolled members must be taken during the year as 576 for the West Coast schools and 430 for the Otago schools.