West Coast three years ago, and the flocking thence to Queensland in February, 1868, and again to Auckland last year, it must be admitted that the restless spirit of the digger cannot be easily bound down to any given locality. That a proportion of these people, by no means inconsiderable, are of a totally different character, and acquire local ties which give them an interest in some particular gold field, is undeniable. But, broadly speaking, I cannot see how alluvial diggers can be regarded as other than a migratory population, who, when a field begins to show signs of exhaustion, as far as the easily obtained surface gold is concerned, or when another field, which on the principle *omne ignotum pro magnifico* promises larger returns, is reported to have been discovered elsewhere, prefer moving away to attempting the development of any other industry which their present field may offer of a more permanent though less exciting nature.

How great is the interval between a digger of alluvial gold and a real miner may be judged by comparing the habits of the former with the manners and mode of life of those who are engaged in the coal and iron mines of England. Rough and uneducated as the coal miner usually is, he is nevertheless persevering in his work. His life is, in fact, one long drudgery. Born on the spot where his labour lies, it is frequently the case, in the black country about Birmingham, that a miner has scarcely travelled five miles from his birth-place in his lifetime. His wages are small, yet he is sufficiently provident to lay by enough, in the shape of subscriptions to his club, to keep him in his old age. Such are the kind of men who are found necessary to obtain a moderate profit for capital employed in mining enterprises at home, or, in other words, whose labour is most efficient. Such, too, is the type to which the miner in New Zealand must approach, before our mineral wealth can be developed. There is no need of the roughness or want of education; but the feeling, whether instinctive or rational, of being a citizen of a certain district, and, more than all, the steady perseverance, are essential. It is true that excessive competition and a large population has in many cases at home brought the miner to a level which we should be very sorry to see him reduced to in New Zealand. Nor do I wish that the comparison drawn should for a moment be viewed in this light. All I desire to deduce is, that mining industries cannot be systematically worked, or lasting success of any kind be expected, unless those who are engaged in the working, whether or not they may be owners of the mine, are content to devote their whole labour, not for a year or two, but permanently, to the work, and to look upon the district where they are employed as their home. There is no reason, beyond the pre-existing monopoly of capital at home, why the English mines should not be worked upon the co-operative principle, by the same persons now employed in them. It is entirely owing to the lack, amongst gold diggers, of the perseverance and steadiness possessed by the English miners that they are unable to co-operate and form companies—except in comparatively rare instances—and thus give a sufficient security to men of property to enlist their assistance in the enterprises of the practical diggers. In Victoria and California we find that, with respect to deep placer mining and the working of quartz mines, the kind of co-operation to which I have alluded has been most successfully established, and proved for the manifest advantage of both miners and capitalists. The same system is being adopted naturally and with similar results at the Thames Gold Fields. The alluvial digger, however, as a rule, appears too clannish and jealous of outsiders to take so wide a view of his own interest, and conform to a practice which, though contrary to his prejudices, could not but benefit him largely. In order to judge of the practicability of overcoming this difficulty, it will be necessary to examine whether it results from the nature of a digger's employment, or whether it is the fault in the digger which renders alluvial diggings so precarious an industry.

Nature of Alluvial Gold Fields.

It is a noticeable fact, that of all the different alluvial gold fields which have from time to time been opened in the course of the world's history, none have been found permanent. Even in the time of Strabo the golden sands of Pactolus had dwindled to a mere legend. The land of Ophir, from which Solomon obtained his supplies of gold, has never even been certainly identified. "Gold mines," says Phillips, "were successively worked in Spain by the Phœnicians, Romans, and Moors; and although the amount at present obtained from that country is exceedingly insignificant, it at one period produced large quantities of the precious metal. Both Strabo and Pliny speak of Spain as being rich in gold, and mention various localities in which it was found." Passing on to later times, we find that the gold derived from Brazil and Peru has fallen to a very small quantity. In the present century, the California diggings have been discovered, and the surface alluvial deposits already show a greatly diminished yield. "The gold-yield of California reached its culminating point in 1853, and the exportation of treasure, which rose in that year to $57,330,034, gradually fell until 1861, when it was $40,639,080. About one-third of the gold annually obtained from California is the produce of quartz mining, while the remaining two-thirds are procured from the shallow placer and hydraulic mines." In the year 1866 the export had again increased to $44,364,393. This was probably to be attributed mainly to the greater efficiency of the machinery employed in quartz and deep placer mining, and not to any increase in the yield from the alluvial diggings. In Victoria, I find from a table printed in the above quoted work, that the export of gold has gradually fallen, since the year 1856, from 2,985,695 oz. to 1,545,450 oz. in 1865; yet, during the same period, quartz mining has been annually advancing in that Colony. Even in New Zealand, the most recently discovered fields, it is found that the returns from the alluvial diggings are already fast decreasing; and it would seem to become constantly more evident that our surface yield will be well-nigh exhausted in a very few years.

Mining and Metallurgy of Gold and Silver, p. 19.

Phillips, p. 66.

Page 119.

The facility with which alluvial gold may be obtained, and the readiness with which it may be converted into cash, constitutes an all-powerful attraction for adventurers who have no capital beyond their sinews. On the other hand, when the lessons of history and experience noticed in the preceding paragraph, and the geological certainty that surface diggings are invariably a most transient industry, are taken into account, we cannot marvel if capitalists are very backward in staking their wealth in this species of investment. Besides this, however, it must be remembered that the digger, in most cases being an uneducated man, looks principally at the chance of success; whereas the capitalist, who is accustomed to take all chances into account, would not forget duly to weigh the chance of failure. The average earnings which alluvial diggers have made in Australia are not so much above ordinary wages