

obtained they would be a valuable product, and would tend to make comparatively poor auriferous ground payable for working.

On my last visit to Kuaotunu the miners on that field were desirous of getting a school of mines, with some person to visit it occasionally and give a few lectures. There are some of the late students of the Thames School on the field who would be of great service in giving elementary instruction. As there are about 274 miners on the field, and the mining claims all adjoin one another, a small school here would be well attended and would be likely to produce good results.

*Expenditure on Schools.*—The following statement shows the expenditure by the department on the different Schools of Mines since their inauguration, exclusive of subsidies given towards the school in connection with the Otago University:—

| Financial Years. |     |     |     | Subsidies towards the Erection of Schools of Mines, and Maintenance. | Chemicals and Apparatus, also Mineralogical Specimens, supplied to Schools of Mines. | Salaries of Teachers, and Travelling-expenses, &c. | Total Sums paid by the Department towards the Schools of Mines. |
|------------------|-----|-----|-----|----------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------|-----------------------------------------------------------------|
|                  |     |     |     | £ s. d.                                                              | £ s. d.                                                                              | £ s. d.                                            | £ s. d.                                                         |
| 1885-86          | ... | ... | ... | Nil                                                                  | 36 19 9                                                                              | 1,223 9 10                                         | 1,260 9 7                                                       |
| 1886-87          | ... | ... | ... | 257 16 6                                                             | 409 1 4                                                                              | 2,716 9 3                                          | 3,383 7 1                                                       |
| 1887-88          | ... | ... | ... | 253 15 9                                                             | 253 14 1                                                                             | 1,714 9 6                                          | 2,221 19 4                                                      |
| 1888-89          | ... | ... | ... | 42 10 0                                                              | 6 12 9                                                                               | 1,139 4 1                                          | 1,188 6 10                                                      |
| 1889-90          | ... | ... | ... | 142 2 0                                                              | 181 14 10                                                                            | 716 3 10                                           | 1,040 0 8                                                       |
| 1890-91          | ... | ... | ... | 217 6 6                                                              | 54 8 0                                                                               | 620 9 9                                            | 892 4 3                                                         |
| 1891-92          | ... | ... | ... | 181 14 0                                                             | Nil                                                                                  | 689 5 9                                            | 870 19 9                                                        |
| Totals           | ... | ... | ... | 1,095 4 9                                                            | 942 10 9                                                                             | 8,819 12 0                                         | 10,857 7 6                                                      |

In addition to the expenditure of £10,857 7s. 6d., there has been a yearly subsidy of £500 paid for the last seven years towards the School of Mines in connection with the Otago University, making a total of £3,500 which has been paid towards the maintenance of this school. Taking the whole expenditure on all the schools in the colony—namely, £14,357—it gives an average of £2,051 per annum, but the annual expenditure for the last two years has only amounted to £1,392 4s. 3d. and £1,370 19s. 9d. respectively. This is money well spent, and the colony will reap in future years the advantage in having trained men, both practically and theoretically, to carry on the mining industry. Not only men actually engaged in mining pursuits, but also boys and young men, some of whom are following other avocations, are attending these schools. Great credit is due to Mr. Morley, of Nelson, who has a class of boys studying mineralogy and blow-pipe analysis, the average attendance at his class being over seventeen last year. Similar classes would give the youths an impetus in searching for any rock likely to contain minerals, and this technical training will eventually lead to the mining industry being conducted on a more scientific basis.

#### WATER-RACES.

##### WAIMEA WATER-RACE.

The upper portion of this water-race has been constructed since about 1875, or about seventeen years, and some of the flumes are still standing, very little repairs having been done. A large portion of the trestlework and stringers have been replaced; but wherever silver-pine and rata are used the work is as good yet as when first erected. Small portions of the flumes have had to be renewed, but the most of the original boxing is still sufficiently good to last for some time yet.

During last year a survey of a branch of this water-race was made to Callaghan's, with the view of having an extension to that place, so as to be able to dispose of all the water in the event of it not being used in the vicinity of Goldsborough and Stafford. When this survey was made great expectations were formed with regard to a rich deposit of auriferous wash-drift said to be discovered by Hyndman and party in the flat. On further prospecting this ground it was found there was no possibility of bottoming it without proper pumping-machinery; and until this is accomplished, and the ground thoroughly tested, very little water could be disposed of at this place; but if the deep ground should turn out payable for working, pumping and winding will be done by water-power. The length of this branch race will be 4 miles 62 chains, and the estimated cost is about £4,500.

It is not intended to construct the whole of the race to Callaghan's at present, but merely to construct the first 2 miles and 10 chains to bring the water on to the ground at the head of the Waimea Valley, where there is a considerable area known to be payable for working by hydraulic sluicing. This portion of the race is in course of construction, and is estimated to cost about £1,700.

The sales of water from the Waimea Race are getting less every year. Last year the average number of men employed was seventy-six, while for the previous year the average was eighty-eight. The following statement will show the sales of water and cash received, together with the cost of maintenance and the approximate quantity and value of gold obtained by the miners using water from this supply:—