

### "NEW ZEALAND MINES RECORD."

The publication of this journal, which commenced in August, 1897, has been continued monthly by the Mining Bureau. The "Record" is widely distributed, and copies are frequently sought after by outside capitalists and by the mining journals in England, America, South Africa, and the Australian Colonies. Some of the reports which have appeared have been printed separately and forwarded to the Agent-General and to the parties more particularly interested; while the article "Explosives in Coal-mines" and the "Prospecting Regulations" have been printed in pamphlet form and hundreds of copies sent for distribution to the Inspectors of Mines and Mining Registrars throughout the colony. Special articles on improved mining appliances and metallurgical processes, which appear from time to time, afford information to those engaged in mining in this colony as to the latest and best methods in use for economical milling and gold-extraction in other countries where mining is carried on.

### AID TO DEEP-LEVEL MINING.

The substantial aid given by the Mines Department from votes allocated for furthering deep-level mining has been the means of aiding and carrying on various works to that end in the Hauraki district of the Auckland Goldfields.

The Hauraki Properties Company, at the Thames, has completed the expenditure of their proportion of the cost of machinery and sinking at the Queen of Beauty shaft, and the full amount of the subsidy authorised towards that work, viz.: £25,000 has now been expended, £21,270 15s. having been paid during the past year.

The deep-level tunnel at the Jubilee Mine, Waitekauri, has only been extended during the year to such an extent as to be entitled to a further payment from the vote on that account of £61 4s.

The Kapanga Company, at Coromandel, has been subsidised to the amount of £503 6s. 11d.

The total expenditure from the different votes has been £21,835 5s. 11d.

### GEOLOGICAL EXAMINATIONS.

In the season of 1897-98 Mr. McKay, the Government Geologist, was engaged during December in making an examination of the reef deposits of Kirwan's Hill and the adjacent ranges on the west flank of the Victoria Mountains, between Larry's Creek and the Waitahu or north branch of the Inangahua River. His conclusions are that the rocks of the district examined are the same as those that extend from the eastern sources of Rainy Creek to Big River, and that the rich quartz found on the surface of the southern slope of Kirwan's Hill is derived from reefs in the neighbourhood, which will probably be found along the western boundary of the Lord Brassey Claim.

After the New Year the survey of the Hauraki Goldfields on the Cape Colville Peninsula was continued during January. At the beginning of February Mr. McKay went to Whangaroa, north of the Bay of Islands, for the purpose of examining the outcrops of copper-ore occurring in the Valley of the Pupuki River, from which examination it would appear that there are considerable bodies of ore, some of which is of high quality, but as yet very little has been done in the way of proving the importance and permanence of the supposed lodes.

At the same time an examination was made of the western part of the Kawakawa Coalfield, in order to ascertain the probabilities of success of recent efforts to reach coal by boring on that part of the field lying to the south of Scoria Flat. Mr. McKay does not think that the operations of the Russell Syndicate will be attended with success.

On the Cape Colville Peninsula work up to April was chiefly confined to a belt of country following the Ohinemuri Valley from Karangahake to the sea, on the east coast, south of Mātaura. Along this belt of country the geological features were studied with care, and a large collection of rocks and minerals was made, illustrating conditions at the surface and in the various mines. One important result of work in this southern part of the goldfields is the proof that in some of the mines rhyolite rock forms the walls of the lode and spherulitic rhyolite has been found associated with the older group of volcanic rocks on the higher part of Karangahake Mountain.

Te Puke Goldfield was visited, and a general similarity of the rocks and quartz lodes to those of the southern part of the Hauraki Goldfields was made out, yet Mr. McKay finds that there is no direct connection between the south continuation of the Cape Colville ranges and those of the Te Puke Goldfield.

In the Thames field Mr. McKay's work was confined to the district between Tararu and Hape Creeks, and to an investigation of the disposition of the various classes of country found on that field, an investigation of the effects of the Moanataiari fault or slide, and of other slides on the field, and the identity or otherwise of the country on each side of the main faults.

### DIAMOND DRILLS.

The application of diamond drills for the purpose of boring to test the deeper levels in the gold-mining districts of the colony has not up to the present proved to be a success. The varying nature