

that it would be advisable to plug the hole which had been bored through, and which when measured showed only 20 in. of solid ground between the two faces. Brean plugged the hole as suggested, and knew that deceased was charging this and the other four holes, and was waiting for the signal agreed upon to fire. This signal, which is always given, consists of the miners' knocks followed by distinct knocks denoting the number of holes to be fired. Brean in his evidence at the inquest stated positively that before he spit the holes bored on his side he received the signal as arranged with deceased that morning before commencing work that he was ready to fire. Brean spit both holes and walked out of the drive to a place of safety. It appears from the evidence given that deceased, after charging the holes on his side, had one of nature's calls and walked out of the drive, being absent a few minutes. On his return he went into the face, leaving his mate Dean to attend to the lights so that he could see to reach a place of safety after spitting the holes. Shortly after, Dean heard the miners' signal given, a short pause, and whoever was knocking seemed to be in the act of repeating the signal when the first hole went off; he could not swear whether the knocks were given by deceased or Brean. After the first hole went off Dean rushed to within 14 ft. of the face and saw deceased lying on the floor of the drive. He called out but got no reply, and then ran for assistance.

Dean, accompanied by the manager and others, went to the top level and found that the holes fired had made a connection sufficiently large to enable them to enter the face where deceased was lying. It was found that deceased had received the full force of the explosion on the head and that he was dead. Subsequent examination of the place by Mr. M. Paul, Inspector of Mines, showed that no attempt had been made by deceased to fire the holes charged, and that he was killed by the hole bored through being fired by the concussion of one of the holes fired by Brean immediately under it on the other side.

In the Inspector's opinion this accident should never have occurred, as the men were able to talk to each other and arrange for firing, and it is quite evident that there was a grave misunderstanding, but no evidence to prove who was to blame.

The following verdict was returned by the Coroner: "That the deceased, Thomas Liddell, was killed by an explosion in the Rising Sun Mine at Owaharoa on Monday, the 9th day of August, 1920. There is no evidence to show clearly how this accident occurred, but it is quite apparent that some grave misunderstanding as to the signals given by Brean existed in the mind of deceased, hence his remaining in the face until the fatal explosion occurred. I am satisfied that the mine-manager has taken every precaution against accident, and has warned the men accordingly." Rider: "In view of this fatality I would strongly recommend that, where approaching faces are closely nearing each other, both faces be fired separately and not simultaneously."

As the result of subsequent litigation the widow and children of deceased were awarded, by consent of the Rising Sun Gold-mining Company, the sum of £1,250 as compensation for their loss.

IV. GOLD-MINING.

The following statement shows the value of the bullion-production, also the dividends declared, number of persons employed, and the number of gold-mines and dredges:—

| | Production of Bullion, 1920.* (All Mines.) | Dividends paid, 1920. (By Registered Com- panies only.)† | Number of Persons ordinarily em- ployed at Productive and Un- productive Mines. | Number of Productive Quartz- mines, Alluvial Mines, and Dredges, 1920. |
|-------------------|--|---|---|--|
| | £ | £ | | |
| Quartz-mining ... | 415,868 | 100,981 | 1,382 | 23 |
| Dredge mining ... | 34,672 | ... | 112 | 12 |
| Alluvial mining‡ | 77,777 | 4,445 | 409 | 122 |
| Totals, 1920 ... | 528,317 | 105,426 | 1,903 | 157 |
| Totals, 1919 ... | 702,131 | 123,744 | 2,143 | 187 |

* In addition to the gold produced from the gold-mines, silver was obtained from them, hence the word "bullion" used in preference to "gold."

† The profits of privately owned dredges and mines are unobtainable, which renders this statement incomplete.

‡ The bullion-production is from 122 alluvial claims, but the dividends are only ascertainable from those few that are the property of registered companies.

(1.) QUARTZ-MINING.

At the productive quartz-mines no development of importance occurred during the year, at several of them mining being discontinued owing to exhaustion of the known ore-bodies. These include the Talisman and New Zealand Crown Mines at Karangahake, the Progress, and Keep-it-Dark Mines near Reefton.

The average value obtained per ton of ore treated declined from £2 0s. 1d. during 1919 to £1 15s. 10d. during 1920.

At Coromandel the Hauraki Mines (Limited) has proved the continuation of the shoot of ore in Legge's Reef below the 260 ft. level, where it was faulted. The bonanza above that level