Non-fatal.

Waihi Mine.—On the 2nd September, 1913, blasting accident. Robert Glasgow received serious injuries to his skull and spine, but is now almost recovered.

Waihi Company's Electrical-power Station, Horahora.—On the 10th October, 1913, F. C. Smale was severely burnt on both legs and hand by coming in contact with live wire.

There have been numerous minor accidents, but those quoted are the most serious.

MR. BOYD BENNIE, INSPECTOR OF MINES, THAMES.

May Queen Mine.—The year's work has been confined to the No. 10 (1,000 ft.) level. On the Exchange reef, east and west of the main crosscut, about 300 ft. has been driven. A crosscut has also been advanced a distance of 270 ft. to intersect the Vanguard reef, which should be met with after another 30 ft. of driving. As the main crosscut at the 1,000 ft. level encountered the Moanataiari Slide, and a shortage of coal occurred owing to the strike, the Thames-Hauraki pump stopped and the mine was flooded. On several occasions during the year I inspected the mine, and always found it in good order. No ore was crushed. An average of ten men has

been employed.

Thames Deep Levels.—The Victoria crosscut has been extended a further 70 ft. to a total length of 500 ft. seaward from the main crosscut. It having been found that the main crosscut face was dangerously near to the Moanataiari main slide it was agreed that a deviation should be driven, the point of commencement to be at the point where the Waiotahi shaft would meet the main crosscut at the 1,000 ft. level. At the time it was considered that the drive would be sufficiently distant from the slide to avoid all danger, but unfortunately this did not prove correct. On the 30th September last, the deviation being advanced a distance of 493 ft., water and gas at great pressure burst through the floor of the deviation crosscut at a distance of about 25 ft. from the face. So great was the inflow that the workmen were compelled to make a hurried exit, and all attempts to resume work have since failed. According to the known position of the slide it is safe to assume that the water forced its way through 100 ft. to 120 ft. of country. It is most unfortunate that the present delay has occurred, for a further 157 ft. of driving would have completed the connection with the Kuranui-Caledonian shaft which the Deep Levels Mining Board was formed to accomplish. The quartz veins met with during the year have been very few and small, varying in width from 2 in. to 4 in., containing mostly crystallized limestone and calcite. During the year I inspected the mine on several occasions, and found it in good order. The ventilation, which has been well maintained, was always much above the standard required by the Act. An average of ten men has been employed throughout the year.

Thames-Hauraki Pump.—The year just closed has been full of incident as far as pumping operations have been concerned, but with the exception of two accidents to the draw-lifts, the plant has run remarkably well. On the 5th January, 1913, the pump stopped for about eight days to allow of the annual overhaul, the most important piece of work being the fitting of a new pinion-wheel, imported from England, on the crank-shaft of the pumping-engine to replace the old one, which had several broken teeth. In the shaft the new steel girders carrying the bottom plungers were stiffened and supported by heavy timbers. A staging was constructed at No. 5 level to facilitate the operation of bucket-changing. The stoppage caused the water to rise 140 ft. in the shaft, but on the 13th January the pumps were again in commission, and on the 24th of the same month the shaft was clear of water. On the 15th February, water having been again tapped at the 100 ft. level, the pumps were taxed to their utmost; but on the 19th February the borehole was closed, and the speed of the pumping-engine was reduced to normal. On the 21st February a hoop on one of the draw-lift buckets burst, and not only caused the bucket to become jammed, but bent three and broke one of the draw-lift rods. Both steel and wrought iron have been tried in the construction of these rods, but with the same result. In order to prevent a recurrence of such an accident a hoop of a different construction was successfully introduced and the bucket altered to suit. On the 7th June, without warning, the two prongs at the fork at the top end of one set of draw-lift rods broke clean off, and allowed the draw-lift rods to fall away and jam the bucket in the working-barrel. Considerable difficulty was experienced in effecting repairs. On the 30th September a large flow of water, accompanied with much gas, was met with at the 1,000 ft. level deviation crosscut. This necessitated the speed of the pumps being increased from seven to seventeen revolutions per minute to cope with it. Since that date and up to the 13th December last, when the pump stopped for the annual overhaul, the speed of the engine has been gradually decreasing, on which date the number of revolutions per minute was seventeen. The air-compressor and Roots blower gave entire satisfaction throughout the year, but on the 24th October, owing to the scarcity of fuel on account of industrial troubles, the former was stopped and the latter was run at a reduced speed, it being necessary to ventilate the shaft to permit of the pumps being attended to. I examined the plant on several occasions during

the year, and found it in good order.

Saxon Mine.—The north crosscut at the No. 7 (552 ft.) level was extended a total distance of 135 ft., when the No. 3 reef was intersected, but owing to an influx of gas (CO₂) and the inadequate means of ventilation work was suspended. In June last the Sirocco single inlet fan of 55 in. diameter, driven by a Pelton water-wheel, was installed, thus allowing work to be resumed at the No. 7 level. A crosscut has now been driven about 500 ft., with the object of cutting the Cardigan Nos. 1 and 2 reefs, which should be intersected after another 50 ft. of driving. The mine was inspected on several occasions during the year, and found to be in good order. Nine men have been employed. No crushings were made.

Waiotahi Mine.—During the early part of the year work was confined to driving east on the main reef and stoping on the new and cross reefs at the No. 7 (528 ft.) level. On the 3rd March