

deadly fumes arising from spontaneous ignition, the absolute freedom from serious accident is a matter worthy of commendation. The provisions under the Coal-mines Act are strictly observed. Seven inspections were made.

*Tyneside Proprietary Company.*—(R. Alison, mining-manager).—(24/11/1904): This colliery, situated directly behind the railway-station at Brunner, is opened by a circular winding-shaft 97 ft. in depth, with a finished diameter of 10 ft., and operated on by two single-decked cages, whilst the adit on the south bank of the River Grey provides a suitable travelling-way for the workmen and an efficient intake for ventilation. During the year mining operations have been somewhat changeable from single to double shift to meet the requirements of trade, but on the whole work has maintained a fair average, the output showing a gross tonnage of 38,406 tons. Development has been chiefly confined to the extension of the dip haulage-road, which has been driven on an average gradient of 1 in 4 to a distance of 20 chains in a direct line from the shaft, the coal-seam won having maintained a fair quality during the whole distance driven. In connection with the driving of the dip, it was anticipated that the well-known Kimberley fault would intersect the coal-seam at about 15 to 16 chains from the shaft. It appears, however, that the produced line of fault, on crossing the dip heading, was simply traceable in the roof. On this assumption the management is confident that this extensive fault has pinched out and does not extend into the back areas as was originally considered. Meanwhile, further driving is suspended pending development from the Wallsend shaft. In view of proving the quality of the coal eastward, development has been more actively pushed, and, so far as the face has advanced, prospects are more favourable. Ventilation has received important attention, each district of working being ventilated with separate air-currents, the haulage-road acting as the main return. In addition to the influence effected on the return current by the heated column of steam-pipes, it is now further supplemented by the installation of a fan of the "Hayes" type, 6 ft. 6 in. in diameter, which is being driven to meet the present requirements of 25,000 cubic feet per minute, but has a capacity for a much larger volume. Since this mine was reopened, pumping has been a sore point in the economy of working, but happily this defect is now more systematically arranged by a much-needed system of water lodgements, the present system having placed the former anxieties within the range of comfort to all concerned. Respecting the west working there is little change of importance to note other than the routine of ordinary operations. Gas was reported in two of the heading-faces. Reports are kept to date. Six inspections made. A slight burning accident was reported.

*Brunner Mines* (R. Alison, mining-manager).—(24/11/1904): The quantity of coal won from the pillars extracted in working homeward from No. 1 fault towards the mine-mouth not only proves the consistency in which operations have been effected, but reflects credit alike on the part of the workmen and officers employed in the care exercised to prolong the life of the mine, also their little homesteads. To say the least, the greater part of the pillar-area extracted was so extensively worked in former years that further expenditure to reopen and work the ground was considered hopelessly worthless, and would incur an unnecessary waste of labour and capital. However, the labour and money expended have not only reaped a fair reward to all interested, but their efforts have provided a means whereby they have participated in an honest and contented living, notwithstanding the difficult and broken character of the ground dealt with in many instances, while immunity from serious accident has been a marked feature in the operations. Fireclay being a product of considerable value in the economy of this mine, special care has been equally taken to exhaust its resources thoroughly, for, like the coal, only patches remained for the last comer. Speaking on the general conditions afforded, it may be fairly assumed that the name of the Brunner Mine may yet be mentioned as a going concern in the Mines Annual Report of next year, providing precautionary steps are taken to work the remaining portion of the coal gradually, and allow the heavy overburden to settle down without throwing any undue subsidence on the elevated terrace land overlooking the Grey River, as it is important in the interests of the residents to take all the coal procurable without running any undue risk. The examinations of Brunner and Tyneside Mines are strictly made monthly by the workmen, and the reports recorded at the colliery office are highly satisfactory. Boring operations, now actively pushed on on the St. Kilda Flat, have attained a depth of 200 ft. Marls associated with quartzose bands have so far been found in the borehole. The ventilating-fan having been knocked out of working-order by the effects of the mine-working, ventilation is assisted by a steam-jet. Reports and other provisions of "The Coal-mines Act, 1891," are strictly observed. Seven inspections made. James Hunter, miner, sustained fracture of right leg.

*Point Elizabeth Colliery* (New Zealand State Coal-mines; James Bishop, manager).—(23/11/1904): In continuation of my report of last year, the various operative works and economic developments in connection with the handling of the mine-output have been practically completed in a substantial manner, and since export trade was opened with the colliery in June of 1904, 60,255 tons has been forwarded for railway, commercial, and household purposes. The active centres of mining operations have been confined to the coal-seam won on Nos. 1 and 2 rock-driven tunnels. At the two points stated, the seam where firstly intersected varied in thickness from 12 ft. to 16 ft., but as the winning-levels and rise headings were extended on the level course and to the rise of the field a decrease in thickness of the seam soon became an alarming factor in the economy of operations; so much so that the workable thickness in many places does not exceed 3 ft. Therefore, to cope with this extensive and disappointing thinning, immediate measures are required to prevent serious reduction in the output, and it is pleasing to note that the management, being fully alive to the position, have lost no time to test the field dipward in driving a dip heading off the main level in No. 2 section. The dip, now driven a distance of 20 chains, has proved an unbroken section of coal-seam of superior quality and thickness, which positively indicates that the major part of the field extends to the dip of the present working. Machinery of a temporary character is used to meet prospecting requirements, but, providing future developments