

*Millerton Colliery* (owners, Westport Coal Company, Limited).—Since the company opened this valuable section of their mining lease as a coal-producer, the growing and satisfactory increase of output maintained proves the efficient, permanent, and practical developments which have been perseveringly pushed forward to meet the rapidly increasing trade requirements and develop the colliery to the standard of efficiency originally designed. Notwithstanding that production depends chiefly from percussive pick-machines in the limited east dip area, last year's output shows a creditable increase of 32,712 tons over the preceding year, and a total of 158,129 tons, thus making the gross tonnage since mining was commenced in 1895, 450,598 tons. As showing the high standard of safety realised, and the immunity against accident experienced, only one slight mining accident was reported for the year. A considerable item in output was produced from twenty colliers in the rise district west of main haulage-road, directly connected with and in addition to the present dip mine. Developments towards Mine Creek area are permanently and efficiently completed, with the exception of winning or opening out the coalfield. This work is being steadily pushed forward, and a successful future from this property is anticipated. The endless-rope-haulage system, extending 40 chains in length, was successfully started in August last. Attached to the surging-drum (in addition to the powerful brake-strap) are four hydraulic cylinders worked from quadrant centres. This arrangement has reduced wear-and-tear of plant to a minimum, and the motion of the rope is controlled more effectively. Surface arrangements to meet immediate requirements comprise two Babcock and Wilcox 86-horse-power boilers, with feed-water heater attached. The motive-power supplied for the percussive pick-machines is generated from three Leyner compound air-compressors of the ordinary type. The plant is spaciouly housed near the mine entrance, with ample accommodation to meet mining requirements to double present capacity. Ventilation is maintained by a 10 ft. diameter Scheile exhaust-fan, and the results over the whole mine are adequate and effective. In company with the men appointed on behalf of the miners, I made a careful inspection of the old workings on the 21st November. During the examination no indications of heating or gas were found. Timber is freely used throughout the mine by the company's officers, and all reports are kept up to date. The provisions of the Act are strictly observed. Weekly examinations are made of the old workings, and duly reported. Previous to the fan installation gas was reported several times, but the use of safety-lamps was strictly enforced, and since the full air-current was maintained gas is unknown and open lights are in use.

*Denniston Collieries* (owners, Westport Coal Company, Limited).—These collieries have been fully employed during the year. The aggregate output (211,357 tons) is very creditable, and compared with past statistics is the largest tonnage recorded. An increase of 8,843 tons is shown over the preceding year. Of the above total, three-fourths is won from percussive pick-machines, the remaining one-fourth by hand-labour, paid at tonnage rates.

*Coalbrookdale Mine.*—(29/12/1900): Developments in the Cascade section are kept well in advance. South of the haulage-road the main fault-line which intersects the "Look-out" working area was successfully crossed, with satisfactory results, the coal-seam found being of excellent quality, with an average thickness of 20 ft. North of the rope-road the workings extend 40 chains, and a very large proved area awaits development in that direction. In view of extending the main haulage-road further east to strike the Cascade dip boundary, a direct haulage-engine actuated by compressed air is placed in position to sink and open out this extensive section of coalfield. Compressed air for driving pick-machines, likewise all underground machinery, &c., is generated near the Cascade dip-incline entrance. The plant consists of two Leyner straight-line driven compound (or two-stage) air-compressors, with 14½ in. steam, 16 in. low-pressure, and 10 in. diameter high-pressure air-cylinders. Steam is supplied by two Babcock and Wilcox boilers of 120-horse power each. The whole plant is spaciouly housed and finished in a creditable manner. Munsie's pillar section continues to be successfully worked west of dip heading. On the east side lower level prospecting-drives are being driven in advance of the old workings. Careful inspection was made of the various sections of old workings, but during examination no indication of heating or gas was found. No serious accidents reported. Reports kept to date. Air-measurement, 28,000 cubic feet per minute.

*Ironbridge Mine.*—(28/12/1900): The parallel dip headings in the Cedar Creek section are actively pushed forward towards Mount William. The coal is of splendid quality, and covers a large area. Extension of area adjoining Mount William was applied for by the company, and granted by the Hon. the Minister of Mines. Eight miners are employed removing pillars in the Fan district. This pillar section of hard bright coal—22 ft. in thickness—was opened out from the south outcrop about a year ago. Drainage is effected by open channel cut across the workings and discharged into Cedar Creek. Great care is exercised in removal of these pillars, and loss is reduced to a minimum. On the North Waimangaroa district removal of pillars was opened out from the west outcrop, eight miners being employed. This coal-seam—7 ft. in thickness, with average sandstone roof—offers facilities for practically exhausting the ground without loss. The drainage scheme contemplated to unwater the Cedar Creek dip areas is now under way. Levels and course of rock-tunnel are determined, and the work preparatory to clearing away the loose *débris* to form the tunnel-entrance is commenced. The calculated distance to be driven is about 30 chains, and arrangements are made to carry out the whole work with Leyner's rock-drills, actuated by compressed air. The completion of this scheme will effectively drain the whole mine, and give free access to exhaust the standing-pillar areas, without risk of flooding from inbreaks of surface-water. As a motive-power compressed air has superseded electricity for underground mechanical appliances. An efficient plant of the ordinary type, with ample capacity to drive all underground haulage machinery, pick-machines, pumps, &c., is built at Kiwi, a central position on the south bank of the North Waimangaroa River. Steam is supplied by Root's tubular boilers, the whole plant being spaciouly housed. A machine-lad named John Hart