

In view, however, of producing a more suitable coal for household and general requirements, No. 3 rock-tunnel has been reopened, and driving continued to win the seam on lower levels. The tunnel is securely timbered.

*Murray Creek Coal-mine* (J. Billet, owner).—(17/12/1906): Open face—The stripping is sluiced off and kept well in advance of the face. The supply of coal is chiefly used for steaming purposes at the Golden Fleece battery and Energetic Mine.

*Phoenix Coal-mine, Reefton* (John Knight, owner).—(27/12/1906): This elevated coal lease of 15 acres, situated near the head of Murray Creek, contains two coal-seams of excellent quality, with an average thickness of 20 ft. each, and angle of inclination 1 in 3. The seams are parted riseward by a thin clay band, which thickens dipward. The coal-seam, which has the reputation of a first-class article, is easy of access. Coal has been obtained therefrom during the last thirty years, consequently the lease is practically riddled with old drives. About eleven years ago a central section of working was lost by creep, and never again reopened, and during the heavy floods in June of 1905 the thin and broken overburden finally crushed down the whole of the working and pillar areas, with the subsequent result that a large section of the road leading to the Inglewood Mine subsided. This movement of the underlying strata seems to have continued, and on the 26th December spontaneous fire suddenly burst through the fallen ground. Under my supervision, between the 27th and 31st December, three formidable fires were encountered and subdued; but later on smoke has commenced to show through the surface over the old creep-working. The party having spent considerable time and labour in suppressing the open fires, a subsidy to the extent of £1 for £1 up to £50 has been granted to divert a small creek over the lease. Coal-mining on the property is meantime suspended.

*Lankey's Creek Coal-mine, Reefton* (owners, Pascoe and Watson).—(13/12/1906): Since this party was reconstructed development is more promising, particularly in connection with the surface works. The tramway connecting the mine with the surface incline has been thoroughly overhauled and relaid with steel rails. The brake arrangements are rebuilt, and useful improvements made on the incline. Thickness and quality of seam are well maintained on the western section of the lease, and a heading is now in progress to connect with an open section of old working, which will further extend and facilitate operations.

*New Inkerman Coal-mine*.—All operations here are abandoned.

*Devil's Creek Coal-mine, Reefton*.—Since last report there has been nothing further done on this property.

*Progress New Coal-mine, Reefton*.—(17/12/1906): Since the present section of working was opened by the new rock-tunnel, coal-getting has been much simplified, and ventilation is well maintained through the various openings on the outcrop. Timber is freely used where required, and the general workings are in good order. The coal is exclusively used at the Progress Mines.

*Loughnan's Coal-mine, Reefton*.—This property changed hands during the year, and under the new ownership was shut down.

*Blackball Colliery* (owners, Blackball Coal Company (Limited)).—(11/12/1906): Operations are continued on single shift, the output showing an increase of 8,974 tons against that of the preceding year. Underground and surface development are unimportant. The recent equipment of endless-rope haulage, free drainage, and mechanical ventilation are in every respect efficient to meet all present and future requirements necessary to exhaust the newly opened section of dip-working. During the working-out of the rise areas, which extended over a considerable number of years, spontaneous combustion has been a continuous source of danger, causing a ruinous expenditure in the working of the property; but on exhaustion of these areas in March, 1906, precautionary steps were taken whereby all connections between the rise and dip workings were effectively sealed off by the construction of three strongly built brick and cement dams, capable of raising the mine-water over the whole heated areas: thus safety is assured against any possible spread of fire extending from the exhausted ground. Guided by the experience gained in the exhaustion of the rise areas by the ordinary bord-and-pillar work, the management has decided to exhaust the dip areas by the more improved "panel system," the system of ventilation installed being highly suitable and effective to sweep off any resultant gases that may occur through the outbreak of fire in any one panel directly into the main return airway without risk to life or property. In blocking out the field the panels have each a measured area of 200 yards by 150 yards, the panel being exhausted in the first working and accordingly sealed off. Apart from the more direct action in dealing with the exhausted ground, the working economy claimed is—full advantage gained in the first timbering, a higher percentage of round coal, with largely improved working-conditions, and minimum of risk. Regarding the development of this district of dip-working, the field is opened westerly by two main levels, driven in parallel lines from the bottom of the dip rock tunnel for a distance of 61 chains, the seam still continuing to maintain coal of excellent quality. Rising from the main haulage road, the winning headings which intersect the field and connect the intake and return airways are firstly holed and completed for free ventilation before the ordinary work of getting coal is commenced. Hence, all smoke from explosives and other gaseous impurities are swept directly into the return from each separately ventilated district. On the whole, working-conditions are simple and well regulated. The provisions of the Act are strictly enforced, and all reports kept to date. Average ventilation by Capell fan, 50,000 cubic feet per minute, circulating over a total of seventy-nine men employed underground. Mean velocity of air-current in fan-drift, 926 ft. per minute. No serious accidents reported.

*The Paparoa Coal-mining Company (Limited)*.—(7/1/1907): Mr. Ashley Hunter, C.E., kindly provides the following brief résumé of proposed works: The number of workmen actively engaged on this mine is 130, and the varied works actually in progress include bushfelling, the formation of railway-line, roads, and tracks on the property. These, together with the erection of suitable camp accommodation for the workmen, and certain preparatory works incidental to pushing on with the inclines and