

Dennehy's Mine, Schultze Creek.—Mining operations have been suspended during the greater portion of the year.
Bellvue Mine.—The work of driving winning-places has been continued throughout the year.
Cain's Mine.—Work during the year has been of a routine nature.
Bellbird Mine, Ten-mile Creek (Fauth and Party).—The work of driving on the coal has commenced.
Fiery Cross Mine (Currie and Party).—The mine has been opened up and coal-winning operations commenced.
Allan and Party's Co-operative Mine.—The output has been won from pillars left behind in the old Coolgardie Mine, Brunner.
Smith and Party's Mine.—Work has been confined to the extraction of pillars.

INANGAHUA DISTRICT.

Reefton Coal Co.'s Mine.—During the year the dip workings became flooded, the pumps being unable to cope with the water, and the mine is closed. The premature extraction of the pillars is partly responsible for the influx of water. The pillars in the dip are small and irregular in size. Four small contract parties are now working in the eastern portion of the lease.
Morrisvale Mine.—Work to the dip has been stopped, no boiler being available to provide the necessary power.
Matchless Syndicate.—This small area forms part of the Morrisvale lease. Work during the year has been confined to pillar-extraction.
Perfection Valley Syndicate (Morrisvale Lease).—A pair of headings have been continued on the strike of the seam.
No. 3 Mine (Morrisvale Lease).—From a point on the hillside a short dip has been commenced and levels broken away to the right and left.
Archer's Mine, Caplestone.—Operations consist of driving two headings to the rise for a second outlet and return on No. 2 seam. The seam pitches steeply. The coal is carted by lorries to Cronadun Railway-station.
Waitahu Mine.—This mine has worked intermittently during the year; only a few tons of coal were produced and sold locally.
Osborn's Mine (White Rose, Merrijigs).—This is a small coal-mine, nine miles from Reefton. Two men are employed. The coal is sold locally.
Calliope Mine.—The mine was idle throughout the year.
Reddale Mine.—Mining operations have ceased, and the company is in liquidation.
McLaughlin's Mine.—Two men were employed during the year.
Clele Mine.—Faults and rolls prevented the further development of this mine, and work is now confined to pillar-extraction. It is proposed to open up another portion of the lease.
Phoenix and Venus.—All coal produced during the year has been won from outcrops adjacent to the fire area.
Coghlan's Mine, Caplestone.—Operations consist in driving the main and back levels to make a second outlet, the previous one having been blocked by falls. Only a small portion of the slack mined is sold, as the cost of road transport is excessive.
Doran's Mine.—This small mine has ceased operations.

NELSON DISTRICT.

A. O'Rourke's Mine, Murchison.—The old workings have been abandoned and a drive started in the seam at a lower level. The seam is 3 ft. thick and of good quality.
Broxbourne Mine.—This small mine has been closed.
Marble Creek Mine.—No work has been done during the year.
Stone's Mine, Takaka.—Mining operations having set up movement in the overlying strata, the main drives collapsed. The mine has not since been reopened.
Winter's Opencast, Motupipi.—The coal lies below high-water mark, and surface stripping is carried out at low tide.
Ellis's Mine, Takaka.—Two prospecting-drives were started, but mining operations ceased towards the end of the year.
North Cape Mine.—The old mine has been reopened and a fault pierced by a dip drive proceeding in a north-easterly direction. The seam is 3 ft. 6 in. thick and of good quality.
Puponga Mine.—Prospecting operations to the west of the old mine have proved a seam of coal of fair quality, and the workings are now being extended in this direction. In C mine the coal in the main level has increased from 3 ft. to 5 ft. 9 in. Three inclines proceeding south are being continued in coal 6 ft. in height.

LOSS OF COAL.

The coal-seams of the West Coast vary in thickness from 3 ft. to 50 ft., and it is in the larger seams that the greatest loss of coal occurs. The general method of working is the bord-and-pillar system, no special precautions being taken to guard against fire. In most of the larger mines the mistakes of the past are being recognized, and the panel system is now being extensively adopted. Most of the fires that occur can be attributed to one or more of the following causes: (1) Excessive height and width of first workings; (2) inadequate size of pillars; (3) irregular and unsystematic extraction of pillars; (4) loss of top coal in falls of roof during pillar-extraction; (5) incomplete extraction of the pillars.

Many of the fires started have spread over considerable areas. The fires could have been localized and controlled if suitable barrier pillars had been left. In addition to the loss of coal and the increased cost of production, there is no doubt that accidents would have been less frequent if more care had been taken in the laying-out of the colliery in the first instance. The movement of the overlying strata, due to small pillars crushing, causes creeps, and in the readjustment of strains and stresses heavy bumping occurs, increasing the risk to workmen. Ordinary timbering in these cases is not effective. Market conditions are, no doubt, responsible to some extent. The inferior coal, not finding ready sale, is left in the mine, to the jeopardy of the future working. In the Seddonville district three mines have been lost through fires caused by indifferent mining methods. At Denniston and Millerton extensive fires exist that could have been restricted if suitable barrier pillars had been left in the first working. In the Grey district the coal is not so liable to spontaneous combustion, but considerable quantities of coal have been lost in pillar extraction. Larger pillars and more regular line of extraction is necessary.

Inangahua district: Numerous small parties of miners are at work, and the mining equipment is of an exceedingly primitive nature, making any systematic development of the field impossible. Coal is being won principally to the rise under shallow cover. Pillars are extracted prematurely and irregularly, and fires are of frequent occurrence. At the Reefton Coal Co.'s mine pillars to the dip have been extracted and the solid workings have become flooded. Plans of the smaller mines have not been made. If the present methods continue, only a small percentage of the coal in this field will be extracted.

CO-OPERATIVE MINING.

The co-operative movement is extending, and numerous small parties of miners are now working areas that were formerly considered unprofitable. Lack of the necessary capital to procure mining machinery has handicapped the movement to some extent. The advent of the Grey Power Board has removed many of the disabilities of the small parties working at Dunollie. The success of the small mine is largely due to the mobility of the workmen. The collier keeps the mine in repair, and trucks from the face to the nearest lay-by. The number of on-cost men in proportion to the number of colliers employed is usually less than one-half that of the larger mines working under agreement, where all the work is specialized and lack of co-ordination causes inefficiency. The co-operative miner, having to market his own coal, is careful to remove all stone and dirt at the face, and to prepare shots in a manner