

Coalfield, firedamp has not yet been seen or reported ; but its presence is none the less carefully searched for. Being a non-gaseous pit, workmen charge and ignite their own shots, and work is also conducted with naked lights. On the western boundary coal-winning places are worked up to the line of fault, having a north and south trend in accordance with the known faults of this coalfield. Strict attention paid to the requirements of the Coal-mines Act.

*Port Arthur Coal-pit, Kaitangata* (Morrison Bros., owners ; Robert Penman, permit, lessee).—(24/6/09) : The patch of coal worked is evidently in the Vs of a fault, troubled coal having made all around. A drive to the seam at lower level is in coal of workable thickness ; but, meanwhile, not much enterprise appears to be displayed in the working of this mine, which is worked irregularly to suit local requirements. Flax-milling being decreased has affected this and many other small coal-mines in this district.

*Hawthorn Den Coal-pit, Kaitangata* (—Smaill, owner ; John Espie, permit, lessee).—(23/6/09) : The mine is said to have been originally operated by the late Dr. Sewell about twenty years ago. Present lessee has driven to the rise, and also claims that he has exposed a 9 ft. seam of coal with only 2 ft. 6 in. of cover, and which it is intended to work opencast.

*Longridge Coal-pit, Kaitangata* (Nesbit Mackie, permit, lessee).—(6/12/19) : A small mine opened on the outcrop of upper seams of Kaitangata coal series. Drive in about 100 ft. in coal of fair quality, but evidently troubled by faulting of measures. This is the property upon which Mackie and McAllister Bros. had developed small outputs and abandoned after short periods of working.

*Kaitangata Colliery, Kaitangata* (New Zealand Coal and Oil Company (Limited), owners ; O. G. Lockhart, secretary, Dunedin ; W. Carson, mine-manager).—(9/12/09) : Work proceeded steadily throughout the year. Extensive development of the north side section proved a large area of coal to be somewhat crushed and troubled, in marked contrast to the south and easterly advanced workings, which have opened up a seam of superior quality and thickness. By limiting the areas of coal sections opened, together with rapid extraction, it has been found that a larger percentage of coal is won, with decreased expense to owners and less discomfort to workmen, although it has to be said that this method is facilitated by the comparative flatness of the coal-seam locally. As the workings extended it was found that the ventilating-fan in use became inadequate for satisfactory ventilation, and a new fan, having 50 per cent. increased efficiency, is being constructed. Endless-rope haulage has been installed, and is giving every satisfaction, so that the day-shift provides the bulk of the output, instead of having two equal shifts, as was formerly the case. Bickford's patent safety-fuse lighters are in use for shot-firing. Safety-lamps only are in use throughout the mine, some 340 lamps being in daily use. There has been comparative freedom from what might be termed serious accident throughout the year, although a number of minor accidents occurred, with more or less serious consequences to the persons sustaining them. On the 2nd March Samuel Newburn, deputy, and William Oliver, miner, sustained slight burns by an ignition of gas while shot-firing. Newburn, being the accredited shot-firer, reported that he had previously made examination, and failed to find any trace of firedamp in the place. On the 12th August David Dallas, pitheadman, was attacked with hæmoptysis while pushing a truck, and subsequently died from tuberculosis. It is not yet decided whether the occurrence was an accident or whether the work at which he was engaged was responsible for the state of his health. The upcast air-shaft and second outlet continues to be carefully maintained, with a caretaker constantly on the premises. Mine-manager's, underviewer's, and deputy's report-books are systematically attended to, and reports duly entered. Plans kept to date, and all requirements of the Coal-mines Act particularly well observed and carefully attended to.

*Castle Hill Colliery, Kaitangata* (New Zealand Coal and Oil Company (Limited), owners ; W. Carson, mine-manager).—(16/11/09) : Underviewer's and deputy's report-books show that the workings are practically clear of firedamp. Traversed Jordan's seam workings, which with No. 7 dip north, Green's seam, through the roll, are the working districts. Old carriage heading and crosscut, Green's seam, are stopped off. Jordan's seam : 11 ft. on the average, but to north is thinning, being somewhat troubled and faulted. Pillar workings in Jordan's seam south in fairly good order. Ventilation will become improved as the workings retreat. The area of coal-seam across the roll is larger than had been expected ; consequently, there still remains another year's working in sight. Main return airway to ventilating-furnace in good order, as is the furnace itself, which is standing well, having been rebuilt and surrounded by boiler-plate tubes reinforced with railway-metals bent and shaped to suit. On the whole, ventilation of the working-places is hardly what it should be, owing chiefly to the ventilating-furnace proving incapable of adequately overcoming increasing drag in the long air-courses. In discussing this with the mine-manager, that official mentioned that it was proposed to obtain a new fan for Kaitangata Mine, and transfer the present Kaitangata fan to Castle Hill air-shaft. The water-balance for men-hoist at second outlet is reported as being used on trial from time to time. One hundred and fifty safety-lamps in use daily.

*Benhar Colliery, Stirling* (P. McSkimming and Son, owners ; Colin Murdoch, permit, manager).—(8/12/09) : Workings continue easterly in the direction of main fault. The recent survey shows that the advancing workings are now within the area marked on plan as old workings, but unsurveyed. The old workings were lost through fire, and it is suspected that they may now contain water. Owing to shallowness of seam from surface, impending danger, if any, from water-accumulation is greatly minimised, but borehole kept forward, and the person in charge is fully alive to the danger. The staple pit in air-course was rendered unsafe by proximity of a large fall. The person in charge subsequently wrote me that a new airway had been made. Use of blasting-powder appears to be carefully provided for by the management ; one of the workmen, however, sustained slight burns by thoughtlessly holding a pellet of powder in his hand while lighting a fuse.

*Mount Wallace Colliery, Stirling* (F. Park, lessee, and permit-holder).—(8/12/09) : Heating and indications of spontaneous fire having arisen in the fallen workings, the mine is closed, and prospecting