9  $C_{\bullet}$   $-3A_{\bullet}$ 

Ironbridge Mine (14/11/1901): An abrupt intrusion of the underlying formations having displaced the Cedar seam directly in line of main dip heading, fresh developments made deviation from the original heading necessary to win the coal southwards towards Mount William, the variable dip of the measures being purely characteristic of the West Coast coalfield. Extraction of pillars continues to be carried out in the Fan and Kiwi districts with success. The solid section of the Kiwi district is exclusively worked by percussive pick-machines under very favourable natural conditions. The drainage-tunnel (which starts from a low level on the North Waimangaroa River) to effectively unwater the whole areas in the Ironbridge Mine is being vigorously worked on three shifts with Leyner's wet drills, actuated by compressed air. Completion of this muchneeded and important work will dispense with all underground pumping machinery, and give free access to exhaust large areas of long-standing pillars that could not otherwise have been worked owing to probable influx of surface-water through the broken overhead strata. Ventilation of this tunnel is maintained by a fan driven by water-power. Needless to say, the working-conditions are perfect. A section of the main haulage-road, driven through broken hillside formation, shows signs of movement between the "big curve" and Ironbridge main dip heading. As this road commands the full volume of haulage, stoppage means total suspension of operations. Meantime a temporary deviation is being made to insure against risk provided a slide should occur. Afterwards a permanent roadway, driven on defined lines through solid country, will be constructed to cut off all irregular gradients and curves such as exist in the present roadway. The air-compression installation, situated at Kiwi, on the south bank of the North Waimangaroa River, has been further supplemented with steam and machine power. The plant is very nicely kept. Reports are kept to date. Air-measurement, 18,000 cubic feet per minute.

Langford Coal-mine.—This mine still continues to be shut down.

Cocksparrow Coal-mine (owner, Antonio de Philippi).—(7/12/1901): This thin vertical coalseam (chiefly worked to supply the Mokoia dredge with steaming-coal) is well timbered and ventilated.

Whitecliffs Coal-mine.—(6/12/1901): Job Lines, the original lessee, recently reopened this mine with the object of supplying steaming-coal for dredging purposes on the Buller River. coal is thick and is of superior quality.

Coal Creek Coal-mine (George Walker, Rocklands, lessee).—(6/12/1901): The most important rise section of this coal-seam is opened from a securely timbered low level, undercutting the main

Rocklands and other dredges on the Buller River are supplied with this coal.

Golden Treasure and Murray Creek Coal-mines.—(26/10/1901): As these adjoining, partially exhausted, and open-face leases contained a quantity of superior steaming-coal of easy access which the original owners could not dispose of, James Billet, carrier and contractor, Reefton, recently bought over all mining rights in order to insure the Murray Creek battery with regular supplies at reasonable rates. Since change of ownership loading facilities are much improved by direct drayroad to the place.

Lankey Creek Coal-mine.—(26/10/1901): William Lamberton, who formerly owned this mine,

had to suspend operations owing to the lease being "jumped."

Bourke's Creek Coal-mine (owners, Cairns and McLiver).—(23/11/1901): The effort to cut the anticlinal fault-line on the west adit-face and No. 2 incline has been disappointing, as the thinned coal underlying a very bad roof made further driving dangerous and expensive. Natural conditions, however, indicate that, to win the coal-seam economically, developments to open the field from the north side of the terrace are necessary. Meantime trade requirements are being supplied from the removal of rise pillars, while drainage is being effected at the lowest surface-level. Reports kept Reports kept

Phanix Coal-mine (owner, John Fox).—(26/10/1901): The development of this mine is carried out in a safe and orderly manner, and the mined coal takes a first place for household purposes. Two parallel headings are being pushed to crosscut an intersecting fault-line and connect the bottom and rise sections of working. This connection when completed will open the main portion of the field and insure ventilation. At time of writing the property has changed ownership. Reports are kept to date.

Archer's Freehold.—(25/10/1901): The coal mined is from an adit level connected by rises to the surface at regular intervals for ventilation. Instructions were given to replace the timbers in tunnel-entrance, which shows side-pressure. Output has largely increased for dredges and mining

New Inkerman Coal-mine. —(28/10/1901): This coal is exclusively used for steaming purposes Ventilation is good from a direct rise to daylight. at Rainy Creek.

Devil's Creek Coal-mine.—(30/10/1901): This coal lease, recently granted to James Connolly, Reefton, is shut down, and all movable plant removed.

Loughnan's Coal-mine.—(28/10/1901): In consequence of the coal-seam being exhausted to

water-level in the old mine, the dray-road has been extended to open a new face.

Progress New Mine.—(30/10/1901): The mined coal is taken from removal of pillars in the rise level, working homewards from the dividing fault-line. Care is taken to thoroughly secure the ground, and win the coal without loss. An outcrop shown on east side of creek was opened, but results proved a slide.

Waitakere Coal-seam.—(31/12/1901): Local demands are supplied from five separately sub-

divided sections of the coal-seam. Some of the well-kept faces supply good lumpy coal.

Blackball Mine (owners, Blackball Coal Company, Limited; Joseph Scott, mining manager). (12/12/1901): As referred to in my report of last year, the discovery of "gob-fire" November, 1900, necessitated flooding, and, after natural drainage was effected, mining operations were resumed on the 11th February. From this date mining continued without further