the Hikurangi Railway-station, where it is loaded into trucks and sent where required. This coal also is carried over the roads which the County Council and Town Board are complaining are being cut up.

Northern Kiripaka Mine.-Leasehold section: The greater portion of coal mined for the year came from this section. The first working has been completed and pillar coal is now being worked. There were two entrances to the area being worked-viz., the main entrance and Shepherd's tunnel. From these drives the main levels were driven until they junctioned, and from that point the pillar coal was worked, retiring towards the entrances. Thus when the first fall of roof took place the air-course previously used was closed up, and the workings became practically two separate mines requiring independent ventilation-systems. As stated in my previous report, a section of the coal inclines at a steep angle, and it will be extremely difficult to mine a high percentage of that coal, the coal being friable, and falls of roof rock in the waste will rill down and some of the pillar coal will be lost. In the first working the mine has been carefully worked, and the ventilation, which was by a small mine-fan, was generally good. The small mine on the freehold section has been worked by four men on contract.

Cunningham's Crown Lease (Co-operative Mine Section N.E. 48, Block XVI) .- During the year a new mine has been opened out on the same section but fully half a mile east from the former mine. The coal is situated on a hilltop, and is good, but the area is small. A ground tram has been formed from the mine to the Hikurangi-Marua Road, and from there the coal is taken to the Hikurangi Railway-station by motor-lorry.

North New Zealand Coal-mining Company .- This mine has been closed down during the whole of the year, and it is not known when it will be drained and again worked.

## Serious Accidents, 1919.

was caused by his falling while trucking on the 24th July, 1919. Matthew Robinson, Taupiri Extended Mine: Loss of sight of one eye caused by flying coal

on the 3rd February, 1919.

Hector Fairless (aged 16), Pukemiro Collieries: Fracture of both thighs caused by falling between two moving trucks while uncoupling from the haulage-rope at the screening plant on the 9th April, 1919.

A. Harry, Waipa Collieries: Dislocated shoulder caused by a piece of timber falling on his shoulder while he was timbering his working-place on the 22nd August, 1919.

David Cairns, Waipa Collieries: Fractured tibia and fibula caused by a fall of roof-coal in his working-place on the 11th October, 1919.

Peter Aitkin, Hikurangi Collieries: Broken collar-bone caused by fall of roof-coal in working-place, 4th December, 1918.

Richard Wells, Kiripaka Collieries: Fractured radius caused by having his wrist caught between two trucks while coupling trucks on to the locomotive at the mine on the 29th May, 1919.

## WEST COAST INSPECTION DISTRICT (Mr. GEORGE DUGGAN, Inspector.)

## New Zealand State Coal-mines.

Liverpool Colliery.-No. 1 Section: The upper-seam workings on the east side of the Sevenmile Creek are narrowing in from the cast, as the seam is thinning and is split up by hard stony bands. Pillar-extraction on the west side of the Seven-mile Creek is almost completed, in much lower coal than formerly.

Morgan Seam: From April until September no coal was mined from the Morgan seam owing to the shortage of labour. Development is now proceeding to the east and west. The east levels are in 19 chains, and the main west levels 13 chains. This seam is a gaseous one, and to keep the working-faces clear it was found necessary to run the large Sirocco fan continuously. A crosscut stone tunnel is being driven at about 600 ft. lower elevation than the present entry to the Morgan seam. The drive is now in 19 chains. Axial water-feed rock-drills, driven by compressed air, are exclusively used in this tunnel.

No. 3A Section: Twelve miners are engaged in this section, mainly at pillar-extraction.

No. 3 Section: Only a small area now remains to be worked between this section and the No. 3A section, and the working-places entering this area are in thin coal, split up by thick bands of stone. Nos. 3 and 4 inclines, north of No. 4 level, have become too stony to work, and pillaring has commenced there. An incline above the fourth east level emerged at an outcrop in Garvey's Creek, and thus materially assisted the ventilation. The west-side pillars—No. 1 level are now exhausted. Pillaring on the east side above the No. 2 level was commenced early in the vear.

Point Elizabeth Mine.-Only a few miners are employed at the No. 2 section extracting the remaining pillars. A portion of the plant, including an air-compressor, has been removed to the new James Mine near the coast.

James Mine.—This is the recently prospected coal-area near Seven-mile Creek which is now under development. A Lancashire boiler has been placed in position and preparations are being made to commence the stone tunnel on the tramway to connect the mine with the coal storage-bins This tunnel will be about 1,000 ft. in length, rising at a very slight grade of 3 in. and screen. to the chain.