

fault-line. Southern area beyond barren belt: The crosscut haulage has been continued through the barren belt to a point between two boreholes. The coal is 9 ft. thick at this point. The work of dividing up the mine into artificial panels has been continued steadily through the year. The completion of this work will enable large areas at present standing on pillars to be more safely exploited. Ventilation: Every effort is being made to increase the efficiency of the ventilation system so that the cooling effects of the air may be utilized to prevent spontaneous combustion. Fire area: A staff of men has been kept constantly employed on the surface filling in the breaks to exclude the air from the underground fire. The position is now much more secure than formerly. Earthquake damage: The earthquake on the 17th June caused considerable damage, mainly in the underground workings. Fortunately no loss of life occurred. The main haulage-road suffered severely. In the various fire areas the concrete-block stoppings were severely damaged.

Stockton Colliery.—During the year the main levels in the new east area were extended a distance of 20 chains in good coal. The headings are now within 6 chains of St. Patrick's Creek. On the western side coal-winning operations have been confined to Nos. 1 and 2 dips. In No. 1 dip only a small area remains to be exploited. No. 2 dip has opened up a large block of coal. This area is very wet. Surface indications having proved favourable, preparations are being made to penetrate the Webb fault. To the south the main fault has been pierced with a dip drive. Progress has been hampered by water and adverse roof conditions. The quality of coal in this direction is improving. The new substation at Fly Creek was put into operation early in the year, and has greatly assisted both in power-factor correction and in giving additional direct-current power in the mine. A considerable amount of renewal work has been done during the year; a mile of the locomotive track has been relaid with new rails, and Mumm's Bridge and the bridge on the bottom incline have been reconditioned. During March, a train conveying workmen to their homes, after passing over the brow of No. 3 loop got out of control and ran away. Twelve men were injured more or less seriously while attempting to leave the fast-moving train. The earthquake on the 17th June rendered the mine idle for one fortnight, and greatly reduced the output during the following two months. A considerable amount of damage was done to the tunnels, loco-track, and mine generally. The ventilating-fan was destroyed by a subsidence of the hillside. The boiler-walls at the power-house were badly damaged, so that three had to be entirely rebuilt.

Westportmain Colliery.—This small colliery is working in the seam adjacent to the Millerton Colliery. During the year the coal won has been largely got from pillar-extraction. To the east across the creek the new section opened up has proved somewhat disappointing. The main heading was abandoned after reaching a slip. Towards the escarpment opencast workings are being developed in broken country.

Clydevale Colliery.—Operations ceased during the year, and the mining plant has since been sold for removal.

Cardiff Bridge Mine.—Work during the year has been mainly confined to pillar-extraction. Coal is flumed from the face to a bin at the mouth of the mine. The system of fluming from the face is high pillar workings results in the saving of considerable quantities of coal that would otherwise be lost. The top coal is frequently covered by falls of roof-stone. The coal is sluiced from under the falls by the workmen, who are enabled to take shelter some distance back from the dangerous ground. The severe earthquake caused several heavy falls in the roadways, under one of which a workman was buried, with fatal results.

Coal Creek Mine, Upper Mokihinui.—The new area to the east of the old mine has opened out well. The main level proceeding south-westerly was extended a distance of 18 chains. To the east of the main level the coal dipped, and as no pumping appliances were available the places were driven level in the thick coal. It may be possible to recover this coal later by putting in a drainage tunnel at a lower level. As a result of experience gained in the old mine, the width of the working-places has been reduced to 12 ft. and the height to 8 ft.

Chester and Party's Mine.—This small mine worked regularly through the year, four men being employed. The work done has been in the nature of prospecting. No definite line of development has been followed.

Quinn and Party's Mine.—The earthquake on the 17th June caused heavy falls on the main level, and the work of retimbering the roads has seriously interfered with coal-production.

Westport Stateville Mine.—The main headings have been advanced in a southerly direction towards the old State Mine. The coal in the main level has been split by a stone band which divides the main seam into two separate seams. Lack of a proper ventilation plant has hampered mining operations.

Glasgow Co-operative Party's Mine.—Development work is being carried out in the direction of the old State Mine. No definite plan of working has been followed. A number of pillars to the dip have been extracted. Owing to the nature of the roof the earthquake on the 17th June was severely felt at this mine. The breaking of the timbers allowed the shale roof to fall. One of the workmen was trapped and smothered whilst attempting to escape. Fortunately the rest of the men employed were able to reach the surface safely. Numerous small earthquakes following after the main quake rendered rescue work both dangerous and difficult.

Westport Mokihinui Mine.—This property is situated in exceedingly rough country consisting of a series of sharp spurs, and is traversed by numerous faults, so that development on systematic lines is difficult. To the south-east the workings have been cut off by faults and rolls, and pillar-extraction has commenced. To the north-east at an elevation of 50 ft. above the old mine a small section was opened up under favourable conditions. The coal, however, thinned as the crest of the ridge was approached, and work in this portion of the field was suspended.

Charming Creek Colliery.—During the year the tramways from the railway-siding to the mine were completed. Pending the erection of the permanent structure a temporary loading-chute has been erected. Two-ton trucks are being used between the mine and the loading-chute. The adit level proceeding east was driven 10 chains in stone and 3 in coal before the main seam was reached. Two levels were broken off in a southerly direction. All the faces in the southern section are in clean hard coal 8 ft. thick. A rise has been put up to the surface for ventilation purposes. It is proposed to put down several diamond-drill holes to prove the field ahead of the present workings.

Westport Cascade Mine.—The earthquake on the 17th June, followed later by a flood, seriously hampered operations at this mine. Portions of the flume by which the coal is conveyed from the mine to the railway were destroyed. A new section to the west of the Cascade Creek was opened up. All places are being driven not more than 12 ft. wide and 8 ft. high.

Bennett's Mine.—During the year a number of boreholes were put down, and the coal proved to the rise of the old workings. No development work was done.

Rocklands Mine, Buller Gorge.—This mine worked only intermittently during the year.

Whitecliffs Mine.—Two men were employed intermittently during the year.

GREY DISTRICT.

Liverpool State Colliery.—Operations at this colliery have been carried out on similar lines to those of the previous year—viz., the development of the Morgan, Anderson, and Kimbell seams in the No. 2 Mine, and the extraction of pillars from the No. 1 Mine. In No. 1 Mine only a few pillars remain to be extracted. In No. 2 Mine two seams are being worked in three sections. In the Morgan seam the east level has been extended a total distance of 35 chains from the main rope-road. The coal gradually thinned in this direction to a thickness of 11 ft. The western level was stopped on a fault. Development to the rise was carried to within a few chains of the No. 1 Mine workings in coal of a friable nature, 20 ft. thick. In the Kimbell seam the main levels were continued east and west with inclines to the rise. In the main east level the coal thinned