21. *Papakaio Mine.*—(30/6/93): In consequence of the peculiar nature of the coal roof, chipping upward into a narrow crevice, the main levels have to be driven as narrow as it is possible for a man to work in, and then allowed to stand idle for some time. After the lapse of a few months' time, these places can with safety be widened out to the usual size, and the ordinary mining operations followed out. In this way, with ordinary care, the roof may be maintained in fairly good order. The mine is well ventilated.

22. *Willitt's Mine, Papakaio.*—(30/6/93): The working-faces were all examined where coal is now being hewn, and it was found that the good blocks of coal are now few and far between. It appears the bulk of the coal in the mine is now soft and useless; there are blocks of good coal in places, but very difficult to follow any distance, in consequence of the many soft places coming in. Sometimes in the top, and at other times in the bottom, of the seam bands of stone also come in, and cut out in places. It is a difficult mine to work, and one in which there must be a considerable amount of lost labour.

24. *Rosebury Otepopo Mine.*—(4/8/93): All the working-faces were examined, and found in first-class order. The roof is remarkably good throughout the mine. The thickness of coal taken out is 4ft. In consequence of the very bad state of the road to the mine, Mr. Lowe is thinking of opening a new pit at a much lower level, to avoid about a mile of a steep hill gradient. The new pit would also shorten his carting to the farmers and to the railway-station by about a mile and a half.

25. *Willitt's Early Bank Mine.*—(4/8/93): At the time of my previous visit, twelve months ago, a new dip-drive was being put down, at an easy gradient. This was completed, but the seam of coal proved to be very thin, the best of it not more than 3ft. thick, and of poor quality. The output, therefore, has been very small, and is likely to be less in the future.

26. *Shag Point Mine.*—(2/8/93): The working-faces in No. 5 seam were inspected, which was about 3½ft. thick at the boat-harbour, about 30ft. below No. 4 seam and 275ft. from the surface. The coal is clean and good, with a strong conglomerate roof 17ft. thick. No. 5 seam has been bored through at the shaft where it is 410ft. deep, and has thickened to 4ft. 5in., but here it has a 6in. band of clay in the centre. The roof has also altered for the worse, there being an 8ft. layer of fireclay instead of the 12ft. of conglomerate at the boat-harbour. It is the intention now to sink the main shaft to No. 5 seam and open out on it. The present workings in the main shaft are in No. 4 seam, which is 7ft. thick, with a 40ft. conglomerate roof; but it is not considered a good seam, in consequence of several small bands of stone through it, which render it almost unsaleable. It is certainly more trouble than it is worth. Another seam, No. 3 (3ft. 3in. thick), is being worked at the main shaft at a depth of 285ft. This coal is very good, with a strong conglomerate roof. These new workings are about 50ft. below the original and extensive old workings in this mine. The manager stated his intention to sink the shaft to a depth of about 460ft., and from that level drive a tunnel seaward till it intersects the several seams known to exist, and then open out on one or more promising the greater yield and the best quality of coal. (6/4/94): The shaft has now been sunk to the depth stated, and a tunnel driven seaward to No. 3 seam, where it is no thicker than it is at the shaft. Other seams passed through are no better in quality than they were at the shaft. I may mention the fact that in No. 4 seam smooth water-worn quartz stones 1lb. weight are found in the clean coal. I do not remember having seen them in this mine before.

27. *Allandale Mine.*—(3/8/93): All the working-faces were visited, and the roof found to be very good. In some parts of the mine the roof is shale or conglomerate, and in others coal. The coal is not as free from small stone bands as could be wished, but it is supposed they will run out as the work advances towards the dip, where the manager expects to find a large field of clean coal. The air is good throughout the workings.

Central Otago.

28. *McCready's Kyeburn Mine.*—(19/12/93): The main tunnel is now undergoing a thorough overhaul, and all doubtful pieces and sets of timber are being removed and replaced with new timber. The coal stands at an angle of 45° south. There are two seams of coal; one is said to be about 2ft. thick, and the other from 10ft. to 8ft. The depth of the coal seam below the tunnel level is not known. The present workings are a good many feet above the Kyeburn Stream.

29. *Archer's Kyeburn Mine.*—(19/12/93): The new adit, a few feet above the Kyeburn Stream, is now completed to the coal seam, which it intersects at a right angle. The mouth of the adit is about 8ft. above the bed of the stream to give a tip-head, but the adit dips the 8ft. in the distance to the coal, and a drain is made to that level to keep the workings dry. The coal is about 200ft. from the side of the adit and stands nearly vertical. It has been driven on north-west and south-east for a distance of 200ft. and 400ft. respectively. The seam is 14ft. thick, of which there is 9ft. of the centre taken out, the balance being left to protect the walls. The bord worked is 9ft. wide by 6ft. high, leaving from 8ft. to 9ft. of a coal roof to the floor of the old workings, from which the coal was hoisted up a shaft in the terrace flat some two years ago. The mine appears to be carefully worked, and is in good order.

30. *Hill's Creek Mine.*—(16/12/93): Very little work has been done in this mine lately—in fact, there is very little alteration in the open face since my previous visit over a year ago. There is an excavation in the floor of the pit where only a small quantity of coal has been removed. There was no one at work at the time of my visit.

31. *McKnight's Gimmerburn Mine.*—(18/12/93): This pit is an opencast, having a 20ft. seam of coal with from 7ft. to 8ft. of stripping. The coal is lying nearly flat, and the working-face is in good order. The output is small.

32. *Beck and McLean's Pit.*—(18/12/93): The stripping is gradually getting deeper toward the gully; it is now from 7ft. to 14ft., but it is satisfactory to know that the coal-thickness continues the same—viz., 30ft. It is now more or less laminated, and some of the small layers