been won from solid workings. The prospects of this colliery are very bright. Already a very large area of excellent coal has been opened out, and the main developing-headings going south-west continue

to prove that a large area of virgin coal still remains.

Ventilation is maintained by a Schiel fan, producing approximately, 95,000 cubic feet per minute. The Mine Creek section is ventilated by a 70 in. Sirocco fan. In the Mangatini section a 30 in. Sirocco fan of 15,000 cubic feet capacity is installed. In the Lower section a Hayes fan is used. The ventilation of the workings has invariably been found excellent, and the general safety of the mine has been satisfactory.

To deal with the output from this colliery approximately four miles of endless-rope-haulage system is used, while to convey the coal to the principal system self-acting wheel banks combined with horse-

haulage, jigging, and hand-trucking are employed.

Westport-Stockton Coal Company's Mine.—Operations at this colliery have produced an increase of 37,764 tons over the previous year's output, the production for 1912 being 125,000 tons. As during the previous year, by far the greater amount has been won from the B and C tunnels, only a

small proportion having been obtained from the D tunnel.

C Tunnel, Lower West section: For the last nine months of the year pillar-extraction has been in operation, and a very fair proportion of the coal has been won. On the east side the whole of the block of coal has been cut into pillars, and extraction of the same has been proceeding for some time. A considerable quantity of solid coal is still being worked at the top west end of the tunnel. The coal in C tunnel has proved to be of medium hardness and fair quality.

B Tunnel: The workings skirting the boundary of the lease are still in good hard coal, but all places will ere long have reached the outcrop, when it will be necessary to commence on the pillars. A drive to connect the eastern portion of the coal lease was started from B lay-by during the year. This drive will have a gradient of 1 in 15, and will be approximately 27 chains in length. The surface tram-line is being formed to connect the eastern section of the lease with the present mine.

D Tunnel: The Lower East section is still in solid workings, and has still a considerable area to thus open up. In the Top East the coal is being won by pillar-extraction, which, however, will not

last long, owing to faulty ground.

Throughout the colliery the underground haulage is mostly done by horses. Generally the mine has been found to be well ventilated by three fans, two of which are capable of producing 80,000 cubic feet per minute, while the other has a capacity of 20,000 cubic feet. A plentiful supply of mining-timber is used, while the provisions of the Coal-mines Act are observed. The outlook for the future is promising, and should the eastern area prove to be as valuable as the boring has indicated, there is every reason to believe that this property will for a considerable number of years continue to win an

increased output.

Puponga Colliery.—The annual output amounted to 24,405 tons, the greater proportion of which has been won from solid workings. Very little development was done during the year, owing to inflow of water in excess of the pumping-capacity, but this has now been overcome by the installation of a new boiler. Preparations are being made to install a new pump. Pillar-extraction has entirely ceased, the pillars having been won out sufficiently near the dip heading. As a result the output has fallen off considerably. The development of Nos. 14, 14½, and 14½ levels has shown the coal to have improved considerably, and at present it has the appearance of continuity. No prospecting by boring has been done ahead of the present working. Coal-cutting machines driven by compressed air are used in the winning-headings, and are giving good results. The pumping is done in stages, compressed air being utilized for the lower and steam for the top stage. "Monobel" explosive is used to break the coal. The ventilation of the mine is excellent, and conditions of general safety are satisfactory.

Marble Creek Coal-mine, Mount Burnett.—It was expected that by the end of the year this mine would have reached the output stage, but development of the various inside works has proceeded so slowly that it is impossible to say when the mine will become productive. To convey the coal to the coast at Tamatea, an incline with varying grade, three-quarters of a mile in length, is partly completed, from which it is proposed to construct three miles and three-quarters of surface tramway to the proposed jetty. It is intended to haul the coal along the surface line by a small locomotive. No work has been done underground for some considerable time. The seam, which varies from 2 ft. 6 in. to

about 4 ft., dips at an angle of 45°.

truck.

North Cape Coal-mine (Taupata Estates).—The annual output was 4,666 tons, an increase of 2,966 tons above that of the previous year. The main level has been driven 18 chains, and has been standing for some months, owing to the coal having thinned to about 2 ft. 6 in. The area of coal to the rise is not great. It will be necessary to drive to the dip to prove the coal in that direction. The ventilation and general safety of the mine are excellent. Regulations are enforced.

## ACCIDENTS.

The following details are supplied regarding fatal and serious accidents which have occurred in the coal-mines of this district during the year:—

## List of Fatal Accidents.

Denniston (Iron Bridge Colliery).—(11/1/12): A. Syme, miner, killed by a fall of stone from the roof.

Westport-Stockton Colliery.—(2/5/12): D. Parry, killed by a fall of stone and coal from roof.

Point Elizabeth State Mine No. 1.—(9/7/12): Phillip Finlay, miner, killed by being struck by a prop; the prop was knocked out by a fall of coal at the face. M. H. Bell, trucker, killed by a runaway

Paparoa Mine.—(11/11/12): W. H. Ellis, trucker, killed by a runaway truck.