Again the output from New Zealand coal-mines showed an increase over that of the previous year. During 1936, 2,140,217 tons of coal were produced, an increase of 25,033 tons over the 1935 output. There were increased tonnages from the West Coast and Southern District mines, 40,917 tons and 25,899 tons respectively, but the output from the Northern District coal-mines decreased by 41,783 tons below the output for 1935.

The development-work being done by the Hikurangi Coal Co. not having been completed, it was anticipated that the greater part of the Northern District's decrease would be in the Hikurangi area. Instead, the decrease there was only 10,772 tons, but the Waikato output decreased by 26,203 tons.

The number of men employed did not vary much in any of the districts. There were 36 men more in Northern District mines and six more in West Coast mines during 1936 than in 1935. In the Southern District the number of mine employees decreased by sixteen. In that district the output per man was 532 tons, compared with 497 tons in 1935, but in the Northern District the output was 541 tons per man employed, a decrease of 43 tons per man for the year. In the West Coast District, the average output, 456 tons per man, increased by 20 tons per man.

At some of the Waikato mines the screening for the removal of slack was in some cases over screens with $1\frac{1}{4}$ in. round holes. An agreement was made by the companies not to screen through a larger mesh than 1 in. round. As a consequence the amount of slack coal was less than formerly and, owing to an increased sale for the small coal, much less slack had to be dumped. It has been suggested to the companies operating at Ohai to reduce the mesh for screening slack.

From the Waikato Low Temperature Carbonization Plant the output of "Carbonettes" and other carbonized coal steadily increases, and during the months of May, June, and July of 1936 the demand exceeded the production of the plant. The demand for light oil was also beyond the plant's capacity.

Following the completion of surveys on the State coal reserve, Greymouth, of several possible routes for the conveyance of coal from the area to the north of the James Mine, in which two workable seams of coal had been proven, it was decided that the route, part of which is along the present James Mine main-haulage road, is the most suitable. To enable the transport of plant and machinery from the Westport–Greymouth Main Highway to the new mine entrance a traffic road, about a mile in length, had to be formed and metalled. This traffic road will, later on, be used by the bus service conveying miners to and from the mine. A concrete storehouse and a workshop were built at Rapahoe, but, as power to drive rock-drills was not available, two of the four tunnels along the new haulage road were commenced with hand-steel.

Except in the Ohai District our coal-miners seem reluctant to purchase and wear Protector helmets or, as they are familiarly called, "hard hats." Many colliery-managers keep a supply of the hats for sale to the miners. Some are supplied at cost price, and at other mines they are supplied to underground workmen at a price much below cost. Their use is being steadily advocated by all Inspectors of Coal-mines, and Mr. Hughes, the Southern District Inspector, records that two miners wrote to him stating that their lives had been saved by the hard hats they were wearing. During 1935 over 140,000 hard hats were manufactured in Great Britain for use in coal-mines. Unfortunately, a few of the earlier type of hats became flabby and broken after a few weeks' use, but hats can now be obtained of different makes, and they appear to be of much more durable material and of better design than the older one, so should give greater satisfaction to their wearers. One make, recently introduced in England, incorporates a transparent plate at the front. As a protection against "proud" coal that plate can be dropped before the eyes of the wearer, and, when not required, can be pushed up into a recess in the front of the hat. A sample of that hat is being procured to test its efficiency.

The workman distributing limestone-dust in the Liverpool Colliery workings has been provided with a simple and effective respirator which contains two filter pads, one on each side. After use these pads can quickly be replaced by clean ones.

Early in the year attention was focussed on the need for a better type of stop-block for the tops of inclined planes. Many types of automatically setting stop-blocks were designed, some of simple form and others consisting of many parts. The interest taken by so many connected with the industry, from miners to mine-managers, on the subject has resulted in three or four of the simpler types of automatic stop-blocks being adopted, and now, on most of the jigs, the blocks which had to be reset by hand have been superseded by automatic stop-blocks.

The improvement in design of electric safety-lamps goes on, and when lamps which have been in use for years require replacing our mine-managers avail themselves of the opportunity of supplying the workmen with lamps of better design and greater illuminating power.

At the Kaitangata and Liverpool mines three-cell alkaline cap-lamps are now in use, but the upkeep of that type appears to be rather high, and the two-cell alkaline cap-lamp is considered by many as still the more efficient lamp.

Each Inspector of Coal-mines is provided with a reliable British-made firedamp-detector by which readings down to 0·1 per cent. of methane can be made, and many tests are now made by the Inspectors with this instrument in their inspections of mine-workings.

An apparatus for detecting low percentages of hydrogen sulphide in mine air has also been obtained for the Inspectors' use in West Coast coal-mines. This detector indicates the actual concentration of H_2S in amounts ranging from 0·0025 per cent. to 0·04 per cent. by volume.

Reliable carbon-monoxide detectors are now procurable also, and one of American design, to test varying concentrations of that gas as low as 0·05 per cent., is being procured for use at the State coal-mines.