The earlier samples forwarded by Mr. Warren returned a higher evaporative-power than this, but the samples taken in the latter case, though possibly to some extent waterlogged, were otherwise fair examples of the coal as it appears at and near the surface.

X.-XII.—TRIAS (?) OR CARBONIFEROUS.

(a.) Sandstones, Mudstones, and Indurated Shales, with nests of Hæmatite and Bands of Jasperoid Rock.—These rocks, lying to the westward of the coal-outcrop and the same line, have a maximum breadth of exposure towards the southern end of the estate of about one mile. The features over this part are that of somewhat steep hills, with valleys of moderate breadth between. Owing to the presence of lime in these rocks the soils produced are good. The ferruginous rocks are, of those belonging to this formation, of the chiefest interest. Some of them might possibly be gold-bearing; and it is in rocks of the same age and character that copper occurs at Maharahara, in the Ruahine Range, some twelve miles to the north of Woodville.

The Under-Secretary of Mines, Wellington.

ALEX. McKAY, Mining Geologist.

DEPOSIT OF LIGNITE AT MAURICEVILLE, WAIRARAPA NORTH.

REPORT on, by ALEXANDER McKay, F.G.S., Mining Geologist.

Mr. A. McKay to the Under-Secretary of Mines.

SIR,-14th May, 1896. I have the honour to inform you that I visited, on the 11th May, the outcrops of coal on Mr. Kummer's farm, near Mauriceville, and submit the following report on the same:-

REPORT.

A little above the railway-station at Mauriceville, and on the western bank of the Kopuaranga, an outcrop of old rock (whether of Trias or Carboniferous age could not be determined) takes place, and forms, for a distance of nearly a mile, the hills and spurs immediately overlooking the low grounds of the valley. On three sides—north, south, and west—the old rocks are followed by sandy clays, in which and resting on the old rock are at least three seams of lignite. That on Mr. Kummer's land, being the lowest in the sequence, rest directly on the old sandstone of Trias or Carboniferous age. The strike of the seam is nearly N.—S. and the dip west at an angle of about 25°. The thickness of the seam is from 2ft. to 2ft. 6in., but only portions of this are of a quality better than a Carbonaccous shale Carbonaceous shale.

No higher seams have been laid bare on Mr. Kummer's land. Within the section next to the south, belonging to A. Larsen, three small seams are exposed in the bed of a creek passing through the section. None of these are thick enough to be of any value, but they are superior to the lower seam where that was examined by me on Mr. Kummer's section. In every case the lignite seams are followed by sandy papa-clays, of a thickness approaching 200ft., next to which are, in places, loose arenaceous sands that in turn are followed by impure shelly limestones, passing upwards into shelly limestones of better quality. The seams of lignite are too thin and too poor in quality to be of any value now or in the near future.

The Under-Secretary of Mines, Wellington. ALEX. McKAY,

Mining Geologist.

Analysis of Lignite from near Mauriceville.

Fixed carbon	 		 		• • • •	45.01
Hydro-carbon	 •••	•••	 			24.75
m Water	 • • •	•••	 			25.12
Ash	 		 	•••		5.12
						100.00

WILLIAM SKEY, Analyst, Mines Department.

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