High Level D (*Frederick*).—This level being a continuation of former level C, extending from east to west break south till reaching to Waimangaroa River. Same break holds grits of great thickness in face, with a general dip S. to S.E. On top of same, measures are noticed to put on holding coal, which upon going south increases considerably in thickness, till reaching near the Waimangaroa River an upper seam appears to put on, the measures bearing all appearance to basin in mid level E. The following sections obtained throughout this level:—

Section No. 90. Surface crops of coal 6 to 8 inches thick.

Section No. 89.

	Ft.	in.
Surface, fine Grits	10	0
Soft Sandstone, with shaly partings	4	0
Coal	6	0
	20	0

Dip S.S.E. 10°.

Section No. 87.

	Ft.	in.
Surface	1	0
Fine Grits	9	0
Soft Sandstone, with shaly partings	5	0
Blaze	2	0
Coal	15	0
Shale Blaze	3	0
	35	0

Dip S. to S.E. 10°, resting upon hard quartz grits.

Section No. 88.

	Ft.	in.
Surface (1 ft.), Grits (9 ft.)	10	0
Soft Sandstone	5	0
Blaze	2	0
Coal	10	0
Shale Blaze	2	0
	29	0

Dip S.E. to S. 10°, resting upon hard quartz grits.

Section No. 91. Coal crops, varying from 4, 6, and 8 feet.

Section No. 92.

	Ft.	in.
Surface, fine Grits	6	0
Soft Sandstone	3	0
Blaze	3	0
Coal	10	0
	22	0

Dip S. to S.W.

Section No. 93.

	Ft.	in.
Fine Grits	4	0
Soft Sandstone	3	0
Blaze	4	0
Coal	8	0
	19	0

Dip S. to S.W. 10°, resting upon hard grits.

Section No. 96.

	Ft.	in.
Surface	1	0
Fine Grits	10	0
Fine soft Sandstone	8	0
Coal	25	0
Brown Sandstone	6	0
	50	0

Dip W. 10°, resting upon white grit.

Section No. 97.

	Ft.	in.
Surface	1	0
Blaze	3	0
Fine Grits	20	0
Dark flaky Sandstone	24	0
	48	0

Dip S.W. 8°, resting upon hard grits in bed of creek.

The coal in this level is the same in description as that obtained throughout high level A, being in itself a coal of good quality, though soft and friable in nature. The coal throughout the area, as may be observed, dips regularly S. to S.E., the main dip south towards basin mid level E. In this level I am not satisfied but that there does exist a lower seam of coal, high faces of grit being seen in traversing Deep Creek, which crosses through this level (at a lower level than coal above given), resembling much in appearance those grits obtained in mid levels A, B, and C (floor of coal) on N.E. slopes of Mount Frederick; also, as may be seen from sections given in mid level E, along the banks of the Waimangaroa, showing two seams, and a doubt of a third, the probability being that the same lower seams pass