

PART VI

THE BROWN-COAL-FIELDS OF THE SOUTH USSURI DISTRICT

The Tertiary deposits of the South Ussuri district have been determined, from their fossil flora, to be of Miocene age.

The thickness of these sediments is not great, apparently about 140 feet. At the top of the series there is usually a bed of loosely cemented gravels; below the gravels, layers of slightly cemented red and white sand occur, which towards the base, are interbedded with clays of different colours, containing deposits of brown hematite, pieces of carbonized wood and sometimes lenticular beds of lignite.

Lignite has been found at the following localities:

1. Near Ugolnaya station (Ussuri railway), where lenses of lignite have been found.
2. In the Anababira area on the east slope of the watershed between the Suifun and Anababira rivers. The Miocene sediments here consist of clays, sands, layers of coaly slate and two brown-coal seams, each more than 3 feet 6 inches thick.

According to analysis the coal contains: moisture, 18%; volatile matter, 27%; fixed carbon, 41%; ash, 11%.

3. Near Cape Retchnoi, where Miocene sediments similar to those of Anababira have been found to contain four coal-seams of from 4 to 5 feet in thickness. The strike is N.W. with a dip N.E. 20° to 50°. The coal is interbedded with sandstones and grey plastic clays.

The Clarkson mine produces an insignificant quantity of coal. Owing to the lens-like form of the coal-bed and the uncertainty regarding the extent of the area it is impossible to estimate the reserve.

Analysis of the coal of the Clarkson mine: C, 61.33%; H, 12.0%; O+N, 19.67%; S, 0.33%; ash, 6.93%; moisture, 7.54%; volatile matter, 45.50%; coke (non-coal), 54.50%; calorific value, 5,725 calories.

4. At the mouth of the Suifun river near the Fedoroff estate, where a bed similar to the last occurs.
5. On the capes of Korea and on the Turek peninsula, where, also, outcrops of coal of Tertiary age are known.
6. On the east shore of Lake Khanka an outcrop of four brown-coal-seams occurs with thicknesses of from 4 to 6 feet.
7. At the "customs-post" of Novgorodsk in the Gulf of Poset coal-bearing deposits, also of Tertiary age, occur.
8. At the Liapin mines, situated in the valley of the river Hunshula. The coal claims extend along the strike of the coal-bearing series, which has a dip to the W. of 8°. The coal is interbedded with very plastic, grey clays. The number of the seams, according to the statement of the owner, is eight. Their thicknesses range from 1.6 to 4 metres and their aggregate thickness is 15 metres.

PART VII

OTHER BROWN-COAL DEPOSITS IN THE PREMORSKI DISTRICT

The northern part of the Premorski has been very little examined and the available information in reference to its coal-areas is meagre; concerning one area only, near the town of Khabarovski, is there some positive information.