

## PART VIII

## COAL-BEARING DEPOSITS OF THE YAKUTSK DISTRICT

The Yakutsk district is, geologically, one of the least known localities in East Siberia, and the information in regard to its coal-bearing deposits is of a very fragmentary character.

From present information it would seem that the coal-bearing deposits of the Yakutsk district belong to the Mesozoic (Jurassic or Cretaceous), Tertiary and Post-Tertiary periods.

The Mesozoic deposits, attributed to the Volga formation by the noted Polar explorer, Baron Toll, extend along the banks of the Lena river from Bestia station (sixty miles above the town of Yakutsk).

From Yakutsk the river Lena flows along a fault, which separates the Lena tableland from the Verkoyansk mountain chain. On the left bank of the river the Mesozoic coal-bearing deposits appear to lie rather regularly, showing only a slight waviness; in the Verkoyansk chain they are much disturbed.

Owing to the lack of information regarding the geological structure of the Yakutsk district, the classification of the coal-areas according to age, appears to be impossible at present.

## List of localities where Mesozoic and Tertiary coals are found:

1. The Longko-Kaia cliff contains many thin seams of coal (Mesozoic).
2. The Chirim-Kaia cliff, where coal occurs in the form of lenticular masses 70 to 90 feet in length and with a thickness up to 3 feet 6 inches (Tertiary).
3. Nashim cliff, where a layer of coal with a thickness of less than 7 feet, dipping to the S.W., underlies white, sandy clays.
4. From Nashim cliff downstream continuous exposures of white and whitish sandstones are seen in the left bank, in long low undulations. Seams of coal, which in places is of good quality, occur in these measures (Mesozoic).
5. From Jigansk as far as the Ingir river, the left bank of the Lena is composed of whitish grey sandstone, in which, at different elevations, irregular beds of coal are met with.
- Analysis of Bulun coal: moisture, 6.50%; ash, 10.76%; volatile matter, 42.74%; fixed carbon, 40.00%; calorific value, 4,256 cal.
6. The Djanda cliff, in its upper part contains a bed of coal.
7. Sanka cliff.
8. Senyakitskaya Stena cliff.
9. Kazarma-Kaia.
10. At the mouth of the Iakit river, interbedded with sandstones and mica-schists, sandy slates, several thin beds of coal are found.
11. Village of Borogonski Ulus.
12. On the Amga river.
13. On the left bank of the Lunka river a seam of brown-coal, with a maximum thickness of 4 feet 8 inches, outcrops from the mouth of the river as far as its confluence with the Kuerga river.
14. Sergiyef or Surgutskikamin, at a distance of forty miles from the town of Yakutsk. The coal here is 1-3.5 feet thick.
15. Near Tas-Ari island, not far from the delta of the Lena.