

2. THE MONGUGAI FIELD

The Mongugai field lies on the west shore of the Gulf of Amour, four miles from Barabash, in the valley of the Little Mongugai river.

This field is much cut up by eruptive rocks (principally basalts) and the coal-bearing deposits appear in the form of comparatively insignificant islands amid the eruptives. The sediments are heavily faulted and, in many places, the coal-seams are crushed, yielding coal totally unfit for use. The strike of the series is N.E. and the dip S.E. at an angle of 16° – 24° . Seven coal-seams, of different thicknesses, have been found, only two of which, the Petrovski and Stari seams, are mineable. The seams are interbedded with fine-grained, hard sandstones, shales and coaly slates, and contain partings of bituminous slates.

The Petrovski seam has a thickness of 2 feet 3 inches to 2 feet 9 inches and yields a semi-bituminous coal. The lower or Stari seam contains 1 foot 9 inches to 2 feet 5 inches of clean coal.

The area underlain by the two seams is about 280 acres, giving a reserve of 1,500,000 tons.

Analyses of coal from the Stari seam: coal dried at 100° C.—moisture, 0.50–0.60%; ash, 7.73–7.76%; fixed carbon, 70.46–80.34%; volatile matter, 11.49–11.30%; sulphur, 0.82–0.67%; calorific value, according to the Parr calorimeter, 8,219 eals.

PART V

COAL-FIELDS ON THE MURAVIEFF-AMOUR PENINSULA

A band of middle Jurassic deposits, containing numerous seams of coal, in many places of a workable thickness, occurs along the eastern shore of the Gulf of Amour (Japan Sea). Beginning at the town of Vladivostock, it extends northerly in a gradually widening belt nearly to the Suehan railway, where it is covered by Miocene sediments, among which seams of brown-coal are found.

The Jurassic coal-bearing deposits are compressed into folds striking N.E. The dip increases in the direction of Vladivostock, where it is vertical. Different kinds of eruptive rocks (of diabase types) occur, cutting the sedimentary rocks and spreading, as sills, in them. Both the Jurassic and Miocene sediments consist of different kinds of sandstones, shales, conglomerates and seams of coal. A total of twelve seams of coal are found in the Jurassic series of which not more than three or four are of workable thicknesses. The thickness of the seams does not exceed 1.5 metres and in most cases is not more than 0.50 metres. The coal belongs to the class of fat, coking coals.

Up to the present three areas have been mined: the Sviato-Makariévskoye, Podgorodninskoye and Vladimírskoye areas.

In the Sviato-Makariévskoye area three series of seams are found, separated by sandstones and shales.

No. 1 series contains six seams with thicknesses from 1 foot 9 inches to 4 feet 6 inches. No. 2 series has five seams, up to 4 feet 2 inches in thickness, and No. 3 six seams, from 1 foot 9 inches to 2 feet 10 inches thick. The cleanest coal is found in series No. 3.