

island of Olkhon. He also says that the position of the River Selengá, which enters the lake at right angles on the eastern shore, and that of the river Angará, which leaves Lake Baikal, also at right angles, on the western shore, seem to indicate that they have once been parts of a single stream which was cut in two by the formation of the lake.

Chérsky¹ reckons 336 tributaries to the lake, the most important of which are the Upper Angará, the Selengá (which descends from the basin of Lake Kosso-gol), the Barguzin, and others; the only visible outlet is by the Lower Angará, a tributary of the Yenisei.

The water of the lake is clear and transparent, so that the bottom can be seen at a depth of 8 fathoms. The hydrography of Lake Baikal was studied by a commission under Drizhenko. Previously the lake had been regarded as one approaching very nearly the polar type, because observations at deep places were almost lacking. According to Vosnessensky,² director of the meteorological and magnetic observatory of Irkutsk, it ought to be relegated to the category of lakes of the temperate type. Inverse stratification exists only during the cold period of the year (December to June); in summer (June to December) it is direct. At the beginning of the months of December and of June the thermal layers become uniform, and the temperature from the surface to the bottom hardly varies, remaining very near the temperature of maximum density. All these changes occur only in the layer from 0 to 1000 feet; deeper than that the temperature remains constant. In the superficial layer from 0 to 50 feet the influence of different factors on the vertical distribution of temperature is apparent—depth, nearness to the shore and to the mouths of great rivers. In the deeper layer, from 50 to about 1000 feet, the temperature is very uniformly distributed over all the area of the lake.

Owing to the sudden changes of wind, to the fogs, and to the want of protected bays, navigation on Lake Baikal is difficult. From the end of May to the beginning of July a north-east wind with the local name of "Barguzin" blows on the southern part of the lake, and from August there is the "Kultak" coming also from the north-east. The strongest winds are called "Sorma," and blow from the north-west, producing short but high waves, which sometimes rise to the height of 4 feet. During storms, which occur frequently but are of short duration, the waves of the Baikal rise to 6 or 7 feet. In June and July the Baikal is almost calm, and during this lull numerous aquatic plants float on the surface of the water. The lake begins to freeze in November, but it is never frost-bound before the middle

¹ *Guide to Great Siberian Railway*, p. 331.

² See Schokalsky and Schmidt, *Sur les Explorations scientifiques des Mers et des Eaux douces de l'Empire russe*, p. 48, 1907.