

over Central Asia and the neighboring regions. The rivers that flow from the north toward Lake Balkash, and that once doubtless emptied into it, now lose themselves in the wastes and are evaporated before reaching that sheet of water, which is fed only from the mountains to the south. The channels of the Amur Darya, Syr Darya, and other streams bear witness also to the same general desiccation.²⁰⁶ At present, the amount of water supplied by rivers to the Caspian Sea appears on the whole to balance that removed by evaporation, though there are slight yearly or seasonal fluctuations. In the Aral basin, however, there can be no doubt that the waters are progressively diminishing, the rate in the ten years between 1848 and 1858 having been 18 inches, or 1.8 inch per annum.

Owing to the enormous volume of fresh water poured into it by its rivers, the Caspian Sea is not as a whole so salt as the main ocean, and still less so than the Mediterranean Sea. Nevertheless the inevitable result of evaporation is there manifested. Along the shallow pools which border this sea, a constant deposition of salt is taking place, forming sometimes a pan or layer of rose-colored crystals on the bottom, or gradually getting dry and covered with drift-sand. This concentration of the water is particularly marked in the great offshoot called the Karaboghaz, which is connected with the middle basin of the Caspian Sea by a channel 150 yards wide and 5 feet deep. Through this narrow mouth there flows from the main sea a constant current, which Von Baer estimated to carry daily into the Karaboghaz 350,000 tons of salt. An appreciable increase of the saltiness of that gulf has been noticed; seals, which once frequented it, have forsaken its barren shores. Layers of salt are gathering on the mud at the bottom, where they have formed a salt bed of unknown extent, and the sounding line, when scarcely out of the water, is covered with saline crystals.²⁰⁷

The following table shows the proportions of saline ingredients in 1000 parts of the water of some salt lakes:

²⁰⁶ Bull. Acad. Imp. St. Petersburg, xxv. p. 535, 1879. For an account of these rivers and Lake Aral, see H. Wood, Journ. Roy. Geog. Soc. xlv. 1875, p. 367, where an estimate is given of the annual amount of evaporation.

²⁰⁷ Von Baer, Bull. Acad. St. Petersburg, 1855-56. See also Carpenter, Proc. Roy. Geog. Soc. xviii. No. 4. For the composition of the water of salt and bitter lakes, see the analyses collected by Roth in his "Chemische Geologie," i. p. 463 *et seq.*