

Lake Tanganyika (or Tanganika¹) is about 400 miles long by 30 to 60 miles broad, with an area of 12,700 square miles, and lies 2624 feet above sea-level. Little is known regarding the depth of the lake, as it has never been systematically sounded; but a depth of 2100 feet is reported by Giraud off Mrumbi, on the west coast, while Livingstone² states that he sounded opposite the high mountains of Kabogo, south of Ujiji, where he found 1956 feet, and Moore,³ referring to a spot near the south end, speaks of 1200 feet and upwards.

Hore⁴ found the water of the lake fresh, and considered that the taste resembled that of distilled water rather than that of spring water. Frankland, who made an analysis of samples brought home by Hore for the purpose, reported it to be similar to Thames water, but with very much less organic impurity. Moore⁵ says the water of Tanganyika is somewhat salt, though it seems to be fresher now than when Livingstone and Stanley examined it; while, as both these explorers aver, there are traditions among the Arabs that in the recollection of living men it was a lake which never flowed out at all. To-day it drains intermittently by the Lukuga to the Congo, and it is a most remarkable fact that the outlet of Lake Kivu, the Rusisi, which flows into Lake Tanganyika, is five or six times larger than the Lukuga, the outlet of Tanganyika itself. If, therefore, the Rusisi River were cut off from Lake Tanganyika, that lake would altogether cease to overflow. Moore⁶ argues from these considerations that probably, after the drainage of Lake Kivu had been turned away from Lake Albert by the formation of the volcanoes,⁷ that lake overflowed into Tanganyika for a number of years, until the level of the latter was raised to such a degree that it in like manner overflowed and cut a channel to the west into the Congo. This view of the matter explains also the fact that there are everywhere indications that Tanganyika formerly stood at a much higher level. Cunningham⁸ considers the water of Lake Tanganyika perfectly fresh and pure, and says that if, as has been suggested, there has been for ages some sort of periodicity in the forming and breaking of mud and vegetable barriers across the Lukuga River, we must be face to face with a lake in which the quantity of salts in solution has been and still is varying from time to time.

¹ See *Geogr. Journ.*, vol. xxvii. p. 411, 1906.

² *Last Journals*, vol. ii. p. 19, London, 1874.

³ *The Tanganyika Problem*, p. 48, London, 1903.

⁴ *Tanganyika: Eleven Years in Central Africa*, p. 146, London, 1893.

⁵ *Op. cit.*, p. 90.

⁶ *Loc. cit.*

⁷ See p. 610.

⁸ This and other references are to an unpublished memoir submitted by Dr Cunningham.