

gauges of a slight intermittent fall of the land during the period from 1897 to 1906, amounting in all to about $2\frac{1}{2}$ feet. The proximity of the watershed to the lake (the head-waters of the streams flowing northwards to the Victoria Nile near Lake Choga are distant only from 16 to 20 miles from the lake shores) suggests the upheaval of a block along an approximately east-and-west axis, which cut off the drainage lying to the south, and so formed the present lake in the low-lying area between the more elevated ground east and west of it. The waters of the lake are in most parts shallow, the maximum depth being only about 240 feet.

Owing to the wide expanse of marsh and shallow lake which intervenes between the upper and lower portions of the Victoria Nile, the fluctuations in the level of Victoria Nyanza have no effect on the volume of water passing Foweira. These variations in level are divided by Lyons into several classes.¹ The first class includes those due to climatic changes, which affect the lake over long periods, and of which there is much evidence round Victoria Nyanza. Scott Elliot² attributes the flat alluvial plains which fill the valleys above the present lake-level to the detritus brought down by the tributary streams and deposited in the still waters of the lake. The second class includes the oscillations due to variations in meteorological conditions having a comparatively short period, such as that of about thirty-five years detected by Brückner,³ in which a period of high levels is followed by a period of lower levels. Sieger⁴ gives a table of the variations in level of the Central African lakes for different periods. Generally speaking, 1850 to 1878 would seem to have been a wet period, and 1879 to 1886 a dry one, for the whole of Africa; but from what the gauge readings on Victoria Nyanza teach, it is clear that lakes where evaporation is the main controlling factor, and the volume discharged is comparatively small, may vary considerably in level without any marked change in the average rainfall, since the lake-level responds quickly to any temporary increase or decrease of supply. The third class includes the annual oscillations which are due, in the case of Victoria Nyanza, to April and November rains. The fourth class includes the daily oscillations caused by the alternation of land and sea breezes, much more noticeable in landlocked gulfs like Kavirondo (Kisumu) than in more open situations, as at Entebbe. The fifth class includes seiches, of which no precise study has yet been made.

Lake Choga (or Kyoga), 3396 feet above sea-level, is a shallow

¹ *Op. cit.*, p. 33.

² See *A Naturalist in Mid-Africa*, p. 40, London, 1896.

³ *Klimaschwankungen seit 1700*, Vienna, 1890; see also p. 528.

⁴ *Bericht XIII. Vereins-Jahr (1887) Verein Geogr. Univ. Wien.*