

reached its present extraordinarily high level and overflowed into Tanganyika.

Cut off from the great drainage basin of Kivu, the waters of the Edward and the Albert Nyanzas fell considerably, as is evidenced by the old beaches and water-marks all along the shores of those lakes, reaching to 50 feet above the present water-level, till their altitudes are 3004 and 2028 feet respectively. Lyons<sup>1</sup> is of opinion that the shrinkage in the Edward Nyanza is in part due to its having cut down the barrier at its outlet, and he is led to this conclusion by consideration of the fact that the northern half of the Semliki valley is filled with clay, sand, and rolled boulders, while in the southern half low hills lie east and west, some of which may, as an elevated block, have once formed a transverse ridge or barrier across the valley through which the lake overflowed. In both Edward and Albert Nyanzas a large amount of detritus is being annually deposited by tributary streams.<sup>2</sup> Lake Albert is about 100 miles long by about 20 to 30 miles broad, and its area is approximately 2000 square miles. Lake Edward is roughly elliptical in form, about 50 miles in length, 30 miles in maximum breadth, and the area is approximately 1000 square miles. The arm of the lake situated on the equator is practically an independent lake (Ruisamba or Duero, now called Lake George) running to the north-east, and connected by a narrow channel with the main lake.

The Nile emerges from Lake Albert as the Bahr-el-Jebel, and is at first really an arm of the lake; in its course from Nimule, about lat. 4° N., to where the Bahr-el-Ghazal and the Sobat enter, it changes first to a tumultuous stream, with rapid succeeding rapid, and then north of Gondokoro to a river in its plain tract, with anastomosing channels and ox-bow lakes. The weed barriers, which form from time to time on the Bahr-el-Ghazal and give rise to flooded areas, sometimes not far short of 30 miles in breadth, are known by the Arabic term "sudd," signifying to dam. Much definite information about the sudd is now available, owing to the recent sudd-cutting operations, and Sir W. Garstin<sup>3</sup> describes them very fully.

**Lake No**, at the junction of the Bahr-el-Jebel and the Bahr-el-Ghazal, is a very moderate-sized shallow sheet of water, roughly 5 miles long by 2½ miles broad, and not as a rule more than 7 or 10 feet deep. In the rainy season, as the Sobat rises, it ponds back the discharge of the Bahr-el-Jebel, which is a small constant volume owing to the regulating effect of the swamps already explained, so that a reservoir is formed in the White Nile channel upstream from

<sup>1</sup> *Op. cit.*, p. 72.

<sup>2</sup> See W. Garstin, *Report on the Upper Nile*, p. 9, Cairo, 1904.

<sup>3</sup> Blue Book, *Egypt*, 2, 1902, p. 34, and *Report on the Upper Nile*, 1904, p. 109.