

Shott el Tigri is wholly in Morocco. Shott el Gharbi, or Western Shott, is on the Morocco frontier, and is followed by Shott el Shergai, or Eastern Shott, 140 miles long, at the foot of Mount Saida. Then come the Zahrez-Gharbi, the Zahrez Shergai, the Shott el Hodna, and, beyond Batna, towards the Tunis frontier, the Tarf and other lagoons of the Haracta-depression.

The waters of many of the rivers that flow towards the Sahara either disappear in the permeable strata, or are buried by the drifting sand, and flow along the underlying clayey stratum. Owing to local causes, such as the cropping up of a bed of rock across its course, the buried water may come to the surface and form an oasis with an ordinary well, or it may be caused to rise by boring, thus forming an oasis with an artesian well. The many artesian wells sunk by the French in this region have brought fertility where there was formerly unproductive waste. In one part of the Sahara, the Souf, the water circulates close to the surface of the soil, concealed by a bed of sulphate of lime, and in planting date-groves the entire crust is removed, the palms being planted in the water-bearing sand below; this is termed an excavated oasis.

The Oued Igharghar is a long depression, having its origin in the land of the Tuaregs on the Ahaggar plateau, about the latitude of the Tropic of Cancer, and extending northwards over 750 miles to Shott el Merwan, the southern extension of Shott el Melrir. About 60 miles above Shott el Melrir it is joined by a similar depression, the Oued Miya, and after the junction is known as the Oued Rhir. Although in many parts almost effaced by drifting sands, its bed is still followed by the native caravans. Salt lakes are found at intervals throughout the whole extent of the Oued Rhir; and as the so-called Bahr Tahtani or "Lower River," which flows along an impermeable bed beneath the channel of the Oued, has been reached by boring, a never-failing supply of fresh water can be obtained through artesian wells. The towns of El Marier, Tamena, Tuggurt, etc., are situated on a continuous line of oases, many of which are artificially formed. The sinking of wells in this Oued led to the discovery of fishes, crabs, and fresh-water molluscs at considerable depths in the artesian well called Mezer, near Shott el Melrir.<sup>1</sup> The presence of these fishes and crabs seems to prove the existence of running water beneath.

In the zone of the Areg, or country of the sandhills, the moving sand arrests the course of the running water, and causes pools or marshes (Dhaya) to form, neither very large nor very deep. They are

<sup>1</sup> *Chromis Desfontainei*, *Chromis Zilii*, *Hemichromis Sahara*, *Hemichromis Rollandi*, *Cyprinodon calaritanus*, *Telphusa fluviatilis* (see Paul Regnard, *La Vie dans les Eaux*, pp. 103-105, Paris, 1891); see also Tchihatchef, "The Deserts of Africa and Asia," *Rep. Brit. Assoc.*, 1882, p. 356.