



*T*HERE are few scenes in Egypt which impress the New Zealander more than the amazing contrast between the desert waste and the lush green splendour of the irrigated land. And it is probable, too, that it gives him a much greater appreciation of water than he had before. But for the water of the Nile there would be nothing to differentiate Egypt from other parts of the Sahara. Sometimes green, sometimes a muddy brown, never inviting, there is no more valuable river in the world.

The chief industry of Egypt is agriculture, and the fertility and prosperity of the country are entirely dependent on the irrigation of the land by the fertilizing waters of the Nile. At its annual overflow the river deposits rich sediment brought from the Abyssinian highlands and has created the Delta and the fertile strip in upper Egypt. The height of the flood has been recorded annually as the chief event of the year, since at least 3600 B.C.

On the island of Elephantine, at Assuan, is the famous Nilometer which dates from ancient times. It is a stairway in the river quay-wall, built of hewn stone, and is marked with scales to record the level of the river. The remains of other old Nilometers exist at Philae, Edfu, and Esna. On a quay-wall of the temple of Karnak, near Luxor, inscriptions have been discovered which record about forty "high Niles" of the twenty-fifth dynasty.

In ancient times, as now, Egypt's staple industry was agriculture. She early became a granary for the surrounding world and her corn was exported to the Aegean and to Syria, and later to Rome. Ancient pictures of the fellaheen at work in the fields show scenes which are much the same as those seen on the Delta lands today. By the time the Pyramids were built the flood was already being regulated by sluices and basins; in principle, by the same methods as have been used up to very recent times.

The irregularity of watering caused by the degree of variation in the height of each annual Nile flood prevented the Egyptian from cultivating some areas regularly, and he quickly saw that he could assist nature by taking water out of the river at a point higher upstream than immediately opposite his field and so take advantage of the fall between the two points. He also realised early the advantage of storing water against times of shortage. The Pharaohs of 4,000 years ago created a large reservoir in the Fayoum depression by building the Josephs Canal from the Nile.

Ancient as irrigation is in Egypt, it was not practised on a really scientific system until the British occupation. The khedive, Mohammed Ali, was advised to deepen the canals of Lower Egypt to draw water at the lowest stage of the river. It proved a futile task. The deep channels became filled