

**The Irrigation Pump in Asfun Al-Mata'na Esna-Egypt(1288 AH/1871AD)"Architectural and Comparative Study with its Parallel, the Irrigation Pump of El-Darb in Nag' Abi "Hammadi**

**Abstract:**

**This research paper aims to study and highlight the irrigation pump of Asfun Al-Mata'na, which is currently affiliated with the city of Esna, Luxor Governorate, while the village of Asfun during the reign of Khedive Ismail was affiliated with Qena. The Asfun irrigation pump is one of the water facilities that were built during the reign of Khedive Ismail in 1288 AH/1871 AD, as the Khedive ordered its construction to irrigate the lands in the village of Asfun and the surrounding villages. The irrigation pump was built on the western side of the Nile River, and its aim was to raise the Nile waters due to the elevation of the lands in that area above the Nile water level during most months of the year. Khedive Ismail was interested in the agricultural lands in Upper Egypt, which made him interested in cleaning the canals and building bridges and arches. But perhaps this was not enough to provide the appropriate amounts of water to grow the desired crops; which made him order the establishment of a group of irrigation pumps in Upper Egypt to ensure the arrival of water in the appropriate amount that works to achieve sufficient production of agricultural crops, which are an important resource of the state's resources, especially since Upper Egypt is famous for growing sugar cane, which requires large amounts of water. Hence, there was a need to establish irrigation pumps during the reign of Khedive Ismail, including the Asfun Al-Mata'na irrigation pump. This irrigation pump was distinguished by distinctive architectural and artistic features and characteristics that had to be studied according to the scientific method based on descriptive and comparative analytical study.**