

Great Inventions of the 19th Century / Water: The fount of all life

Although often associated with the desert, the Arab and Ottoman world had a deep cultural connection to water. In the 19th and early 20th centuries, those territories included agricultural countries, hence the importance of water for irrigation, but it was also important as a communication route and for hygiene and religious purity. Irrigation and public use of water had for centuries been organised and distributed using technologies that varied from country to country. At the beginning of the 19th century, Muhammad 'Ali Pasha in Egypt inaugurated the construction of works to improve agricultural production and export. In the following decades, across the Ottoman Empire, dams and public hydraulic works were built using European expertise and know-how. The Arab and Ottoman world was exporting raw materials to Europe, increasing its dependence on the great powers. Reforms and public works were a result of the autonomous initiative of sultans, pashas and khedives, but the long-term consequences were controversial.



Working Number: FR 028

Name: Various hydraulic machines used in Egypt to water the land.

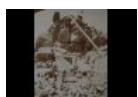
Holding Museum: The first method is constructed in a linear manner and provides the land with water whenever it is in need. Part of "Dyke A"

Date: -

Materials: 1795

Curator Justification: -

When, at the end of the 18th century, the growing interest of French intellectuals in the "Orient" brought them to Egypt, their main aim was to enrich their knowledge of antiquity. But some of them started to look at aspects of local life and activities. These drawings are a precious record of the traditional hydraulic machines used in Egypt for irrigation.



Working Number: IT1 050

Name: The cutting of granite blocks for the construction of the first dam on the Nile. Many Italian stonecutters participated in the works

Holding Museum: Italian Geographical Society (SGI)

Date: 1900

Materials: -

Curator Justification: -

The Old Aswan Dam was built next to the first cataract of the Nile river. It reshaped the surrounding environment: irrigation no longer depended on floods. European workers were attracted by this job opportunity and recreated in Egypt their own traditional social fabric.



Working Number: IT1 051

Name: The artificial channel built at Shellal, during the construction of the first dam on the Nile

Holding Museum: Italian Geographical Society (SGI)

Date: 1900

Materials: -

Curator Justification: -

The Società Geografica Italiana, founded in 1867, conducted geographical studies and explorations of regions still little known in the second half of the 19th century, such as the

course of the Nile river in its southern reaches and especially eastern Africa.



Working Number: IT1 052
Name: Construction Site at Shellal
Holding Museum: Italian Geographical Society (SGI)
Date: 1900
Materials: -
Curator Justification: Italian immigrants working side by side with local Egyptian workers at the construction site of the Old Aswan Dam on the Nile.



Working Number: FR 029
Name: Photograph of the dam of Sennar (Upper-Egypt) during its construction in April 1925
Holding Museum: National Library of France
Date: 1925
Materials: -
Curator Justification: The Sennar Dam, completed in 1925 in the city of Sennar, Sudan, was one of the dams built along the Nile to provide balanced irrigation year round. This dam provided water for irrigation of cotton crops on the Jazirah plain and for hydroelectric power.



Working Number: FR 027
Name: Fellahs (peasants) use a shadouf to draw water from the Nile from a well.
Holding Museum: National Library of France
Date: 1852
Materials: -
Curator Justification: This is an example of how traditional irrigation systems persisted alongside the innovative dams built by the Egyptian governors. Water had been a core issue for Egypt since antiquity. In choosing to catch a glimpse of everyday life, the photographer produced a valuable historical document.



Working Number: IT1 049
Name: Retaining wall of the reservoir in Shellal, Egypt
Holding Museum: Italian Geographical Society (SGI)
Date: 1900
Materials: -
Curator Justification: Giulio d'Aspremont documented for the Società Geografica Italiana the construction of the Old Aswan Dam on the Nile, in southern Egypt. The dam was built by the British engineer William Willcocks, during the British occupation of Egypt, as part of a plan to provide water for irrigation year round.



Working Number: LB 015
Name: The Beirut water factory
Holding Museum: Ministry of Water and Energy
Date: 1896
Materials: -
Curator Justification: Water distribution based on modern technology was implemented in the second half of the 19th century through the reforms issued by the Ottoman sultans. For example, in Beirut, water treatment and distribution was organised through the Beirut Water Company in Dbayeh.



Working Number: TN 029
Name: Zaghwan aqueduct
Holding Museum: -
Date: 1852
Materials: -
Curator Justification: Water distribution for daily use was also one of the great concerns of the reformers in Tunisia. During the government of Muhammad Bey, the ancient aqueduct of Zaghwan was modernised by the French engineer Pierre Colin with a system of pumps bringing water to Tunis.



Working Number: LB 007
Name: Map of Beirut's water networks
Holding Museum: Khalil Itani's Archive
Date: 1873
Materials: Plot handwork
Curator Justification: This map shows the network of water distribution from Nahr el-Kaleb (river) through Beirut. Implemented from 1873 onwards, the Ottoman reform of water distribution in Beirut organised the treatment and supply of water – an example of the reforms that reshaped urban infrastructure.



Working Number: PT 008
Name: Barbadinhos Steam pumping station
Holding Museum: -
Date: Built between 1871 and 1880
Materials: -
Curator Justification: Pumping stations show interesting parallels across Europe and the Arab and Ottoman world, testimony to how modernisation followed a common path; distant countries with similar approaches to modernity or similar economic activities were reshaped by the globalisation of technology and needs.
