Great Inventions of the 19th Century

For many centuries, the Ottoman and Arab lands were at the forefront of human civilisation and achievement in arts, sciences, philosophy, military skills and technology. Until the 18th century, the inhabitants of the region were certain that beyond the borders of Islam, especially in Western Europe, there were only "worthless barbarians". As a result, the Renaissance, the Enlightenment and the technological revolution in Europe passed them by unnoticed. By the end of the 18th century the ideas of the French Revolution, the incursion of Napoleon's French expeditionary forces in 1798 and the three-year occupation of Egypt and Syria, which clearly demonstrated the technological, administrative and scientific supremacy of France, opened the eyes of the Ottoman state and its subjects in the Arab world to the new realities. This encounter made the ruling elite aware that all was not well in their countries. A sense of inferiority to the technological accomplishments, powerful nation states, and economic and military power of the West had developed. The reforming rulers focused on the visible military and economic expression of European power, while the underlying cultural and sociopolitical foundation of European power was ignored. This urge for modernisation started at least half a century before colonialism. Modern technologies were adapted by hiring expertise or sending young people to be trained and educated in the West, but, most of all, by transferring the final products of the technological and scientific revolution: steamships, railways, tramways, electricity, telegraph and other postal services. This exchange in the context of the relations between the European and Arab and Ottoman lands and the dynamics of the 19th century deepened the political and economic dependency of the Arab and Ottoman lands on Europe, which led eventually to their colonisation in the second part of the 19th century.

More:

Innovative technologies

Postal services and telecommunications

Transportation

Water: The fount of all life



The Austrian ship on which Emperor Franz Joseph participated at the opening ceremony of the Suez Canal in 1869

1869

Austrian Military Museum / Institute of Military History Vienna, Austria



Electric telegraph machine 1907 Itisalat al-Maghrib Museum Rabat, Morocco Samuel Morse



Revenue stamp 1888 Bibliotheca Alexandrina Alexandria, Egypt



The disembarking of the first railway car in Libya 1910s Italian Institute for African and Oriental Studies Rome, Italy



Chargeurs réunis. French steam-travel company (with destinations in South America) 1887 National Library of France Paris, France