

## **Universitäts- und Landesbibliothek Tirol**

### **Travels and adventures in Egypt, Arabia and Persia**

**Fogg, William Perry**

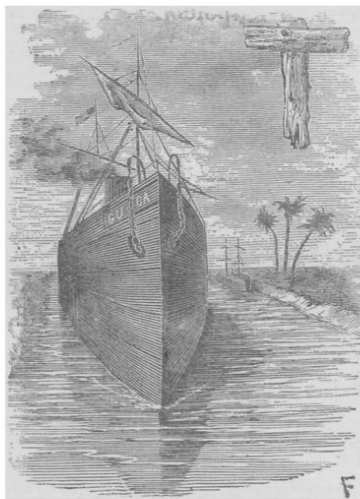
**London [u.a.], [1875]**

Chapter IX. The Suez Canal

## CHAPTER IX.

### THE SUEZ CANAL.

**An Accomplished Fact—Sketch of its History—Reasons Alleged for its Failure—Bugbears Exploded—Is it a Financial Success?—Rates of Tonnage—New Lines of Steamers—The Business of 1873—The Tides—Width, Depth, and Rate of Speed Allowed—Lake Menzaleh—Mammoth Dredging Machines—A Unique View—A Ship in the Desert—Lake Timseh—The Bitter Lake—A Ready Made Canal—We Reach Suez—A Town as old as the Pharaohs—No Pleasant Greeting to the Red Sea—Why Called “Red”—The “Crescent and Star”—The Water never Smooth and Clear—Pharaoh’s Chariot Wheels not to be Seen.**



THE Suez canal, one of the greatest achievements of the century, was opened at the grand *fête* in November, 1869, at which the Empress Eugénie assisted. It was then fully described by special correspondents from all over the world.

As we are now about to pass through the whole length of the canal, I propose to give a short sketch of its history, and such in-

formation as I have been able to gather, as to its present condition and practical working, a matter which, six years ago, was all conjecture, and about which the letter-writers differed so widely. That it is now an accomplished fact,

and a success, no one with his eyes open can deny. As Lardner scouted the idea of ships propelled by steam ever crossing the Atlantic, so Stephenson, the great engineer, and the English generally, for years insisted that the Suez canal would be a failure. Perhaps "the wish was father to the thought." The English government, too, must now feel heartily ashamed of its intrigues with the Sultan to throw obstacles in the way of this great work, on the ground of philanthropy in behalf of the forced and unpaid labor of the Egyptians—for no nation is now reaping so much benefit from this new route of steamers to India, as the English people themselves.

The first great bugbear was the fancied difference in level between the Red Sea and the Mediterranean, by which locks would be required, in accordance with the report of a commission sent out by Napoleon I. in 1798. This idea was exploded by more accurate surveys made fifty years afterwards. The next objection was, that the channel would have to be made through hopeless quicksands at the southern or Suez end, and through centuries of Nile ooze at the northern part near the Mediterranean, where no channel could be made permanent, but the more you dug and dredged the worse it would be. This obstacle disappeared when it was proved that for most of the route, the banks of the canal would not be of fluid sand, but of mud, clay, and shelly earth—that below the Nile ooze and slippery mud of Lake Menzaleh, there was a "hard pan" of clay, which, thrown up, gave solidity to the banks—and that so small a portion of the route passed through loose sand, that no real trouble threatened the canal from the instability of its banks. These objections being disposed of, it was then urged that the sand drift from the siroccos of the desert would refill the canal as fast as it could be removed, thereby causing such immense

expense in keeping the channel open, as to ruin the great enterprise financially. But it has been demonstrated by experience that not more than five miles of its entire length is liable to this drifting in of the sand; and at these places the encroachments of sand never exceed two yards in depth a month, which the company has contracted to be removed, at no great expense, as fast as it accumulates.

To Ferdinand de Lesseps, the world is indebted for having pushed through this magnificent work in the face of every obstacle, real and imaginary. With perfect faith in the eventual success of the enterprise, like Cyrus W. Field, of Atlantic cable memory, he persevered when less sanguine men would have given up in despair; and to him belongs the credit of having opened this second Gibraltar inlet and outlet, to the commerce of the world.

It is true that the Suez canal is a French work, but it is not owned nor in any way controlled by the French government. Of the 400,000 shares representing the stock, 176,000 belong to the Viceroy of Egypt, Ismail Pasha, without whose active and energetic assistance it never could have been completed. The balance of the stock belongs to individuals, mostly Frenchmen. The first "Act of Concession" from the Egyptian government for a canal across the Isthmus of Suez, was granted in 1854. Then followed five years of preliminary surveys and preparation, and the first ground was broken at Port Said in 1859. The Red Sea entered and mingled with the waters of the Mediterranean on the 15th of August, 1869. But it was not until about the 1st of January, 1870, that this thoroughfare, which all ages have wished for, but till now in vain, was opened as a highway to the commerce of the world.

And now, after five years' trial, it will be asked whether this costly work is a financial success. Probably

not, as yet. The preferred stock last issued was guaranteed five per cent.—but to realize this dividend on its whole cost, requires an income of five million dollars a year, and over two millions more for running expenses, repairs, and management. The rate of toll is two dollars a ton register on every steamer, and two dollars for every passenger; sailing ships half that rate, besides pilotage, etc. It costs the steamer I am on, \$1,600 for passing through the canal, which seems a large sum for one day's toll, but it is a trifle compared with the expense of sending her around "the Cape." To make the canal pay from tolls alone, would require at least five steamers to pass each way every day; and at present I am told that the average is about half that number. But the Suez Canal Company has other sources of income. The Viceroy made liberal grants of land to the company, a part of which have since reverted to him in consideration of a large sum of ready money; but fifty per cent. of all land sales in the towns of Port Said, Ismailia, and Suez, where the company owns large tracts of valuable property, comes into its treasury. And since the opening of the canal, new lines of passenger and freight steamers have been established, by which Russia, Austria, Italy, and France are coming into competition with England, for the trade of the East.

The business of the canal has steadily increased since it was opened, but not so rapidly as was anticipated. The income from tolls in 1873 was over \$5,000,000 from the 1,200 steamers passing through. The expense of its administration, including the cost of dredging, about \$2,250,000. Capital stock \$100,000,000, and a bonded debt not very large, mostly held by the Viceroy of Egypt. The surplus income is being absorbed at present by the extension of the breakwater into the sea at Port Said, 6,000 yards, to prevent the silting up of the harbor.

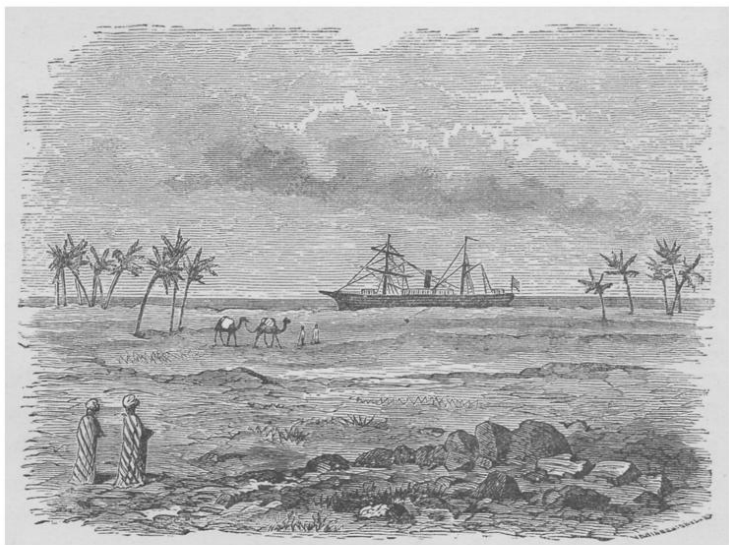
All measurements and distances being in French meters, kilometers, and hectares, I will, for the convenience of the reader, reduce them to English. Our steamer draws sixteen feet, but under her keel is six feet to spare, which is increased about two feet more at high tide. And here I may as well explain the matter of tides. The ordinary rise and fall of the tide at Port Said, on the Mediterranean, is one and a half feet, and at Suez three and a half feet. At the Equinox the maximum rise and fall is about double.

There being no gates or locks to interfere with the free inflow and egress of the ocean at either end, the tides slightly affect the depth of water in the canal, and produce a current which never exceeds two miles an hour, and is lost in the lakes which form over one-half the whole course. At the water line the width of the canal when finished according to its enlarged scale, will be three hundred feet, the depth thirty feet, and the breadth at the bottom seventy feet. This will give space enough for the keels of two large ships to pass each other without inconvenience. At present the average width is about two hundred feet, with not less than twenty-four feet of water in the shallowest spots. At frequent intervals there are wider basins where ships can meet and pass each other. The management is by telegraph, and every few miles we see upon the banks a neatly fitted up telegraph station, from which the position of every ship in the canal is reported at headquarters. The maximum speed allowed is eight miles an hour, which would take a ship through the ninety-six miles between Port Said and Suez by daylight, as no steaming is allowed after dark.

The first twenty-six miles from the Mediterranean, the canal runs through the shallow water and deep mud of Lake Menzaleh. This formed a part of the Nile delta, and was originally one of its outlets. To excavate a ship

canal through the soft, slippery mud of this marsh, with banks that would stand the rush of the Mediterranean within, and the occasional storms on the lake outside, for a long time baffled the utmost ingenuity and skill of the engineers. But when, as has before been stated, it was discovered that by going deep enough they would come to a strong, tenacious clay, underlying the centuries of Nile ooze, which being thrown out and mixed with the mud would form a solid bank, this difficulty was overcome.

These double dykes are about four feet high, and within them are buried the iron pipes through which the great "*Pompe-a-feu*" (steam pump works) at Ismailia forces all the water supply for the city of Port Said.



A STEAMER IN THE DESERT.

Moored to the banks we notice the mammoth dredging machines, which are built entirely of iron. These were not only constructed but invented by the contractors, to

meet the special difficulties and requirements of this service. Ten of these gigantic machines, the use of which I never should imagine if I had seen them anywhere else, cost eighty thousand dollars each, and twenty-five steam barges to carry off the dirt brought up by the excavators, cost fifty thousand dollars each. That these were built by the contractors, will give an idea of the magnitude of the work.

Leaving Lake Menzaleh, the canal passes through nineteen miles of sand, to the next lake in the chain.

From the deck of our steamer the view is unique. We are high out of the water, and I can see over the top of the banks a desert of sand stretching away as far as the eye can reach.

We now come to Lake Timsah, six miles long, upon the western shore of which is the new desert-founded city of Ismailia. The water of this lake is deep and clear, but very salt. We next enter another section of the canal proper, eight miles long, which connects Lake Timsah with Lac Amer, or the "bitter lake."

This was an oval depression in the land, directly in the track of the proposed canal, and is supposed to have been originally the head of the Gulf of Suez. The receding of the water of the Red Sea left it an inland basin, from which the water has long ago evaporated. Upon the bed of this hollow was a layer of salt, in many places several feet in thickness. When the water of the Red Sea was again let into this bed it formed a ready-made canal, twenty-one miles long, in the widest part ten miles across, and deep enough for the largest ship. The salt accumulated in the bed of the lake makes the water very bitter, and hence the name given to it.

Steaming more rapidly through this we once more enter the canal, and three hours after we enter into the har-



bor of Suez, and before dark are comfortably quartered at the "Peninsular and Oriental Hotel."

We shall be detained a few days at Suez waiting the arrival of our steamer, and have an opportunity of seeing whatever is interesting in this old town, which, within a few years, has taken a new lease of life.

The harbor is mostly artificial, and a splendid dry-dock of stone has been built by the Khedive, the only one, I believe, on the waters that flow into the Indian Ocean, this side of India. From the flat roof of the hotel, I can count ten war steamers flying the Turkish and Egyptian flag, the "Crescent and Star."

It is now more than three years since I landed here, coming from India. I then said good-bye to the treacherous waters of the Red Sea, without regret, and I greet them now with no anticipations of pleasure. Why this sea is called "Red" is a mystery. I could never see any roseate hue in its stormy waves, bleak, sandy shores or volcanic rocks. I have read somewhere that when the water is smooth and clear—(*which it never is,*)—the chariot wheels of the Egyptian hosts may be seen beneath the waves. But travelers unanimously agree with old Pharaoh, that the Red Sea is the most disagreeable and treacherous piece of water upon the face of the globe.