

THE LIGHTHOUSE OF LIVORNO – TUSCANY, ITALY

By Annamaria “Lilla” Mariotti

The Middle Ages are usually referred to as a dark period in history, but that it is not completely true. In those centuries the arts started to flourish, which led to the era of the Renaissance. Painting, poetry, architecture, and the beautiful Gothic cathedrals are examples of this era. Also, many lighthouses were erected along the coasts of Italy in the same era. The towers erected by the Roman conquerors along the coasts of Italy, France, and South England have now disappeared, with a few exceptions.

Italy was not yet a nation, but it was divided into many small regions, and every town having a harbor had its own light. The lighthouse of Livorno is one of them, and it has a long history. Around the year 1200 the town of Pisa, not far from Livorno, was one of the most important four Seafaring Republics of its time, together with Genoa, Venice, and Amalfi. They were all fighting among themselves. At the same time, they had a good fleet of commercial ships and were all trading inside the Mediterranean Sea and as far as the Oriental coasts where they could find precious silk and fine spices.

Pisa is not really by the sea. It lies on the Arno, a navigable river, and in order to defend the town, a tower was built in Porto Pisano at the mouth of this river. But soon sea erosion and the sand made useless both the harbor and the light. After this, around 1200, a new lighthouse was erected on the Meloria rocks, four miles off the coast, as a sen-

tinel and an aid to navigation, to prevent wrecking on those dangerous rocks.

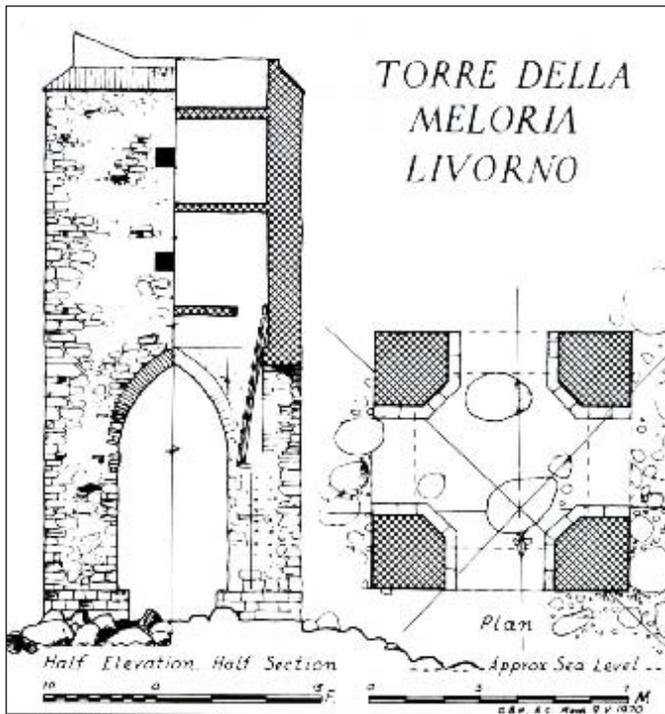
That was enough for the times, but in 1284 the fleet of the Republic of Genoa fought against the fleet of Pisa in front of the Meloria

rocks. Genoa not only defeated Pisa but also destroyed the lighthouse. A new lighthouse was built in 1598 by the Grand Duke Ferdinando I de' Medici, a strong family ruling Florence and later all Tuscany, including Pisa. But the lighthouse was demolished during a storm. A third one was erected in 1712 under the reign of Cosimo III de' Medici, and it is still standing but not working. This tower has a very distinct shape: it is made of four pillars joined by a Gothic arch over which stands the tower itself. It was built this way to let the waves pass between the pillars. It was not until 1867 that a red metal tower, 20 meters high, was located near the historic lighthouse to mark this dangerous spot.

The appearance of the first Meloria light is not known. There are no records of it, but it should have been a stone tower, like most of the period, lighted by a wooden or oil fire on top, with a glass lantern. The medieval glass was thick and dull. The glass was necessary to protect the light from the wind and needed continuous cleaning because of the salty mist. It is certain that the keepers were monks, the only ones able to live in such a lonely place and who received provisions and fuel for the light by boat. The last keeper was friar Galgano of the Augustinian order to whom the authorities allowed 120 liters (about 25 gallons) of oil every three months. But he was not allowed to fish, as the oil was not be used for cooking, but only for the light. He also



Left: The new lighthouse of Livorno. *Fari d'Italia* by Enrica Simonetti.



Above: An aerial view of the Meloria Rocks Lighthouse.
 Left: The plans for the lighthouse. Both images *Il Libro dei Fari Italiani* by Manfredini & Pescara.

coins to pay for wicks, candles, and sponges—the last for cleaning the lantern—and a salary of 15 liras.

In the 14th century, from 1303 and 1305, the Republic of Pisa decided to erect a new and bigger lighthouse near the small medieval village of Livorno, its own possession, on a rocky corner at the west low side of the entrance of what was at the time a natural harbor. It was a moment of peace among Pisa, Genoa, and Florence, so there was time to think about the erection of a monument, which took time and money. Here is another mystery. How much did construction cost? But after such a long time, many wars at that time and a war in more recent times, ancient documents are no longer traceable.

A genial sculptor and architect, Giovanni di Nicola Pisano was called to design the lighthouse, which was soon called Greater Lantern. He followed the building of the lighthouse step by step.

First a polygonal base was built with 13 sides. On top of this was a tower, finished with a fortified terrace, and then a second tower, a little smaller, also finished with a fortified terrace, and then the lantern. At the lower stage of the smaller tower, there were the keeper's quarters and storage rooms. The lighthouse appears to be made of two conical sections, but it is really made of seven cylinders that are placed one upon

the other, having diameters slightly decreasing up to the top. This gives the illusion of a curvilinear taper of great effect. The stones for the whole construction were taken from the nearby cave of San Giuliano and taken to Livorno with a great deal of hard work.

At the base there is a small entrance door, on top of which was engraved the cross symbol of the town of Pisa, which later was suppressed and replaced by the lily of Florence when the de' Medici family also ruled Pisa. Inside there was a wood ladder that, in case of danger, could be taken off; so the tower was also a fortress. Many black rocks were put at the base of the lighthouse to protect it from the rough sea.

The lantern was lighted at first with oil lamps, and then with the passing of time, the system of illumination was changed to compressed fuel oil. In 1841 a first-order Fresnel lens was installed and lit with acetylene gas. Finally, the tower was electrified at the end of the 1800s. Nowadays the light is automatized, lighted by a 1,000-watt halogen bulb. There are no more keepers living inside. Unfortunately, there are no records of the keepers who managed the light, so this story also is lost.

When finished, the tower was considered such a great expression of the human genius that it was admired by the great poet Dante Alighieri, who wrote about it in the fifth chapter of the *Purgatorio* book in his poem

La Divina Commedia with these words: “Stacome torre ferma che non crolla—giammai la cima per soffiare di venti” (“Stands like firm tower that the summit does not fall when the strong winds blow”). In fact this lantern faced six stormy centuries until it met defeat at the hands of man, as we will see later.

Another poet, Francesco Petrarca, praised the Greater Lantern in his poem *Itinerario Siriaco* (Syriac Itinerary) as “validissima, dal cui vertice ogni notte la fiamma indica ai naviganti il più sicuro lido” (“the most valid, from whose top every night the flame shows the sailors the safe shore”). Another writer, Goro di Stagio Dati, in his book *The Florentine Chronicles* mentions the tower as “one of the best jobs made by the whole Humanity,” and so did many other writers and poets of the same and later centuries. The great astronomer Galileo Galilei used to make his experiments on the top of the tower. The



An ancient map of Pisa.

The Keeper's Log—Spring 2010

lighthouse of Livorno was also impressed in some gold coins, which are still preserved in the Civic Museum of Pisa.

Pisa started again to fight, first with Genoa. Around 1406 the town lost its power as a Seafaring Republic after a war with Florence, and it became a possession of the de' Medici family, who bought the town and harbor for 100,000 florins.

Cosimo I de' Medici, a great ruler, realized that Livorno was in a strategic position to become a very important channel of trade in the Mediterranean Sea for Florence, which was inland and was a growing town expanding its traffic all around the known world. So he ordered many works in the harbor to make it more efficient. And the lighthouse was still standing.

In 1583 the Grand Duke of Tuscany, Ferdinando I de' Medici—who, as already mentioned, had ordered a new lighthouse built on the Meloria rocks—made major changes in the harbor, building at the base of the lighthouse a dock yard and a quarantine station for the seamen coming from the Mediterranean and Oriental coasts where there could have been epidemic diseases. It is said that the job was completed in only five days, because 5,000 men were put to

work. Anyway, this changed the appearance of the lighthouse, which was now enlarged at the base by the new buildings, which were still standing by the early 1900s, but now have all disappeared. The development of the harbor went together with a major town-planning of Livorno, whose original plan was designed by the architect Bernardo Buontalenti, who encircled the town with pentagonal-shaped walls.

A major change in the traffic of the harbor was made by a law of March 16, 1565, to control the collection of maritime customs. The departing ships had to stay in line along the wharf, and the loading of cargo was made from smaller boats whose loads were strictly controlled by the custom authorities to make sure the right duties were paid. In 1587 Ferdinando I de' Medici changed Livorno into a free port, which attracted many commercial vessels from everywhere, increasing the traffic.

In these centuries, Livorno was also a military harbor, and the lighthouse saw the Medicean galleys leaving to chase into the Mediterranean sea the dangerous Saracen pirate ships that in these centuries were attacking and plundering the Italian coasts.

By the time of the last of the de' Medici family, in 1736, Livorno had obtained the qualification of town and had more than 30,000 inhabitants, a great harbor, and a lighthouse that was the oldest along the coasts of Italy, older than the tower of Genoa, built in 1543.

In 1737 the dynasty of Lorena started to rule Tuscany. The first ruler was the Grand Duke Francesco I, who enlarged the harbor, which attracted ships from everywhere and became more and more a strong trading center both for goods in transit and in storage, owing to the port's security, provided in part by its lighthouse.

This dynasty ruled for more than a century, during which the town was occupied by French, Spanish, and English troops, but survived anyway.

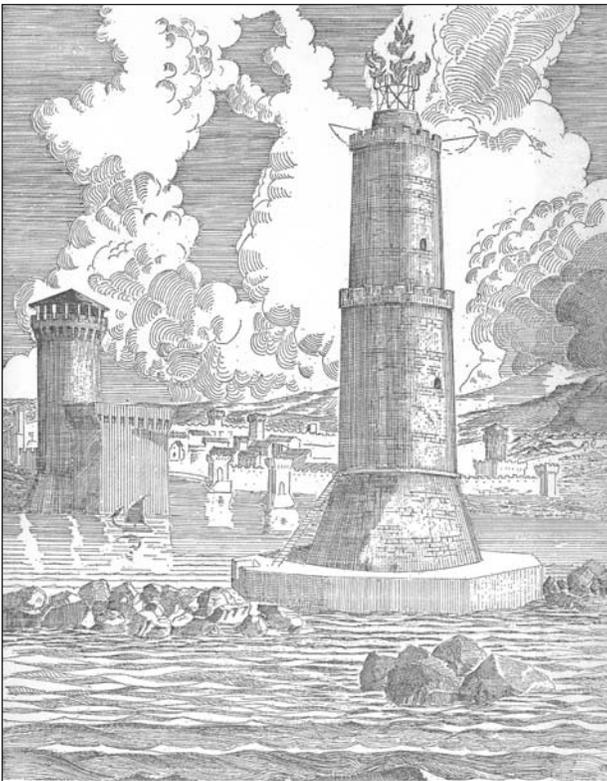
It was only in 1860, after the independence wars, that the history of Livorno became part of the history of Italy, a newborn nation, and the tower was inserted into the list of the Italian lighthouses with the number 1896.

Now we have to fly through the centuries, and arrive at a sad moment in our history. It was WWII. In 1943 the German troops occupied the north of Italy, while the American armies came up from the south. Rome was already free and Florence was nearly so. The harbor and the town of Livorno had been bombed many times by the Americans, but the lighthouse did not suffer any damage. Anyway, its light had been extinguished for a long time to avoid the possibility of a landing near the harbor. It came time that the German troops decided to flee from the Americans, who were drawing nearer. But before leaving, the Germans went to the ancient lighthouse and committed the most terrible insult that could have been made to such an ancient monument. On July 19, 1944, they destroyed it with a charge of dynamite to the foundations, and the old tower collapsed. For centuries it had faced different rulers and the forces of nature, but in a short time it succumbed to a group of men.

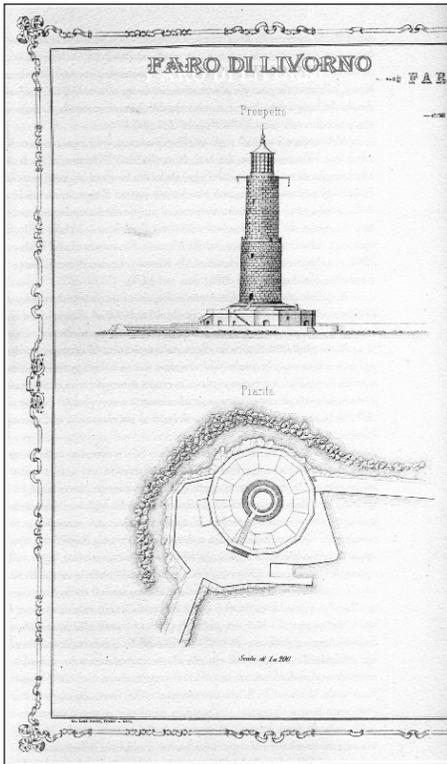
The ruins were left in place, as nobody wanted to remove them until the mid-1900s when the population of Livorno wanted its lighthouse again, not a new one, but "their lighthouse."

The chairman of the local Chamber of Commerce and Industry of Livorno, Mr. Graziani, in 1952 opened a public subscription that in short time reached two million lira, a lot of money for the time, for the reconstruction of the lighthouse. Additional money was found, and work started in June 1954, ten years after the destruction. The job was carried out by the Ghezzani company which, with great faith in what they were doing, followed the original plans of 1303 of Giovanni Pisano, employing 90 percent of the original material and, when missing, using new stones taken from the original cave of San Giuliano. In two years the tower was ready, and the new lighthouse of Livorno had the same appearance as the old one.

It was a miracle. On September 16, 1956, there was the great opening of the lighthouse in the presence of the whole population, as well as higher Italian officials, among them the president of the Italian Republic, who



A sketch of the original lighthouse at Livorno, dating from the time it was built.

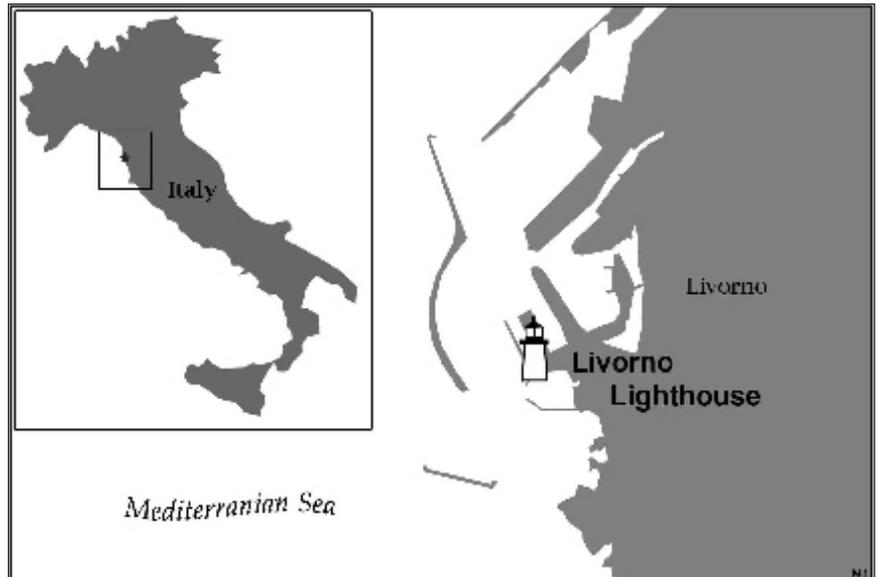


The plan of the lighthouse of Livorno as it was in 1841. From *The Book of the Italian Lighthouses 1876*.

then was Mr. Giovanni Gronchi. A plaque was placed at the foot of the tower to remember the event, and a few years later the lighthouse became a national monument. This majestic and elegant tower was back to life to stand, we hope, for some more centuries.

My visit to the lighthouse was for me a great and exciting event. After special permission from the Navy—in Italy all the lighthouses are managed by the Navy and are considered military precincts and not open to the public—I entered the small door on top of which still stands the Medicean lily that was replaced in its original place. The wooden ladder does not exist anymore, and I started to climb the 224 stairs to reach the 11th floor at the top together with an old keeper, no longer at work, who was helping me.

The tower lies at latitude 43°32'36" North and longitude 10°17'43" East and is 52 meters high, including the lantern, above sea level. The spiral stone staircase, 70 centimeters wide, is cut into the thickness of the internal wall and reaches first the inferior fortified round terrace, 80 centimeters wide, on top of which stands the second, smaller tower. At this floor there was the big room for the keepers and the storage.



Now, on a table, are on display ancient tools used by the keepers in past times.

Going up the stairs I saw small openings, also cut into the thickness of the wall, which allowed a view of the sea on one side and the country on the other side. In the space in the middle of the circular stairs, I could see the ancient weights of the clockwork system that in the past were used, attached to two chains, to manually rotate the lantern. Every few hours the keeper had to wind the system, as the lantern could not be stopped. It works now with a rotating optic that flashes four times every 20 seconds. Its beam can be seen for 24 miles.

Arriving at the end of the stairs it was possible to reach the second terrace and then, after a few metal steps, the lantern room where the view was unbelievable, from the sea to the whole town. I was thinking back to the ancient times, when at the foot of the tower sailing ships of every kind were arriving and leaving with their loads of precious goods. The keeper showed me the page of an ancient log from the date of October 5, 1818, recording something strange that was seen from the tower: a vessel was burning outside the harbor. Men were sent in a

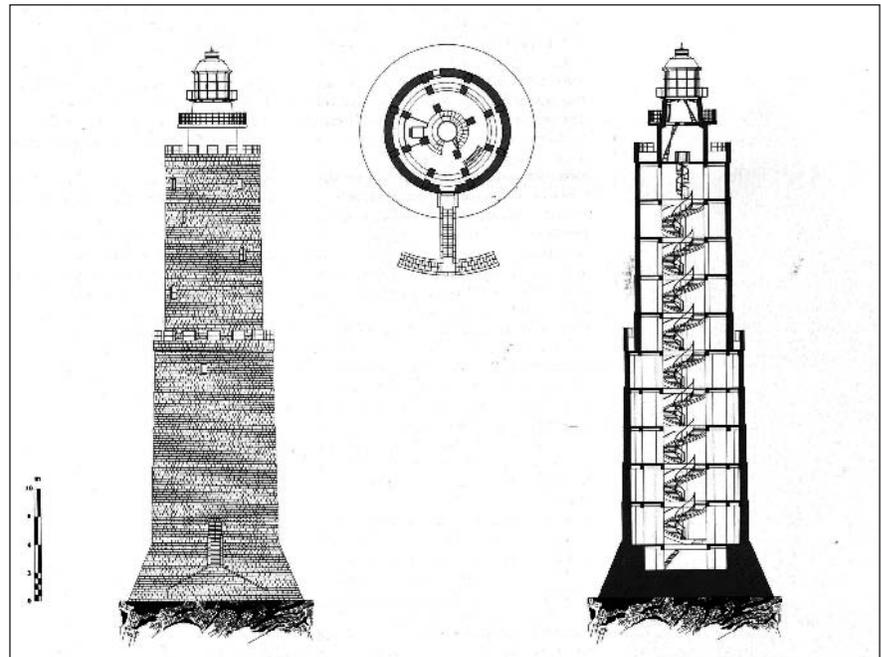


Diagram of the lighthouse as it is today. *The Architecture of Italian Lighthouses* by Cristiana Bartolomei.

The Keeper's Log—Spring 2010

Reprinted from the U. S. Lighthouse Society's *The Keeper's Log* - Spring 2010 <www.uslhs.org>

boat by the port authorities to give help, but when they arrived they found a steamer coming from Naples, whose name was *Ferdinando I*, that ejected from its funnel a lot of smoke. It was the first steam boat ever seen.

The day of my visit was a lovely and clear day, but the keeper told me that it was impossible to stand on top of the lighthouse when the winds blow so strongly that the tower swings and the men cannot stand. Also the mist arising from the rough sea sometimes reached the top, covering the lantern from view.

Another interesting historic event he told me was that in 1853 the Duke Leopoldo II threw into the sea, from the top of the tower, the first stones that were to be used for the construction of a new breakwater, and this was followed by a salute of 101 cannon shots.

Listening to all these ancient stories, I had forgotten everything and it was now time to leave with great regret, because it was my first and last visit to this ancient monument, reborn after so many centuries.

Now Livorno is still an important harbor, with big commercial ships, oil tankers, ferries, and cruise ships arriving and leaving from it. The tower has been obscured by the dry docks



The first round terrace of the lighthouse of Livorno. *Fari d'Italia* by Enrica Simonetti.

and the buildings, and all around it there are cranes that unfortunately deform its silhouette, but the lighthouse of Livorno is still impressive even if it can only be seen from the sea.

When I leave this harbor at night, on board a ferry, which I do every summer, I can see the lighthouse flashing its light over the sea and think that nothing wrong can happen to you as long as you can see its beam over the black sea.

.....
Annamaria Mariotti has written many books in Italian on sea adventures, lighthouses, pirates, fishing, etc. Her only English book is *The World's Greatest Lighthouses*, which is available in the U.S.

If you have any questions or would like to contact the author, please email Annamaria "Lilla" Mariotti at lilla.mariotti@alice.it