

Article

## Lazarettos , Tebhirhane And Tahaffuzhane Buildings

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### Abstract

Due to the international maritime trade and transportation that developed in the Ottoman Empire and whole World at the 18th and 19th centuries, the risk and possibility of disease transmission increased.

The Ottoman government took measures against infectious diseases by carrying out significant studies on diseases such as cholera and plague. In addition to the cholera epidemic in 1835, the plague danger and epidemic were on the agenda. Vessels were quarantined for 20-25 days in these laboratories (lazarettos) in order to control epidemic diseases.. Outbreaks of plague were seen in 1586, 1590, 1592 and 1599 (İnalçık, 1973: 243; Lowry, 2003: 126) .

For more than 300 years (from 1500 to 1800), some regions of the Ottoman Empire in 1778, one-fifth of the population of Istanbul succumbed to the plague. In the 1780s, the daily death of the people of Istanbul from the plague exceeded the number of 1000. In 1792, the plague epidemic was at its peak. European travelers and diplomats recorded 3000 deaths a day in Istanbul. According to the information obtained, William Wittman, a surgeon affiliated to the British Military Mission in Istanbul, reported that 30-40 people died from plague every day during the summer season in Çanakkale in 1798 (Robarts, 2010: 188, 189). The people of İzmir have suffered greatly, as it is a large port city that is in constant contact with the world. Other epidemics and plague recurring in more than half of the century have surrounded the environment (Quataert, 2005: 114). In 1838, Mahmud II, who wanted to protect the sea routes from contagious epidemics, established a committee called Meclis-i Tahaffuz to supervise the quarantine measures and establish a delicacy in the Bosphorus. (Abou-Hodeib, 2007: 227). In this study, the "lazarettos ,tebhirhane and tahaffuzhane" buildings established in United States of America , European countries including Istanbul are examined. It is known that preventing the spread of epidemics has gained importance in the past years, and it is emphasized by medical historians. M.S.7. In the 19th century, Emperor Justinian tried to quarantine those who came by sea from countries with plague epidemics so that they would not interfere with the people of the city.

The first Christian hospitals, IV. It was established in Istanbul in the century (N. Yıldırım). In addition, it is known that hospitals were established in the cities of Urfa (Edessa), Kayseri (Kaisareia) and Sivas (Sebasteia). Religious hospitals, which were opened in Istanbul and functioned as shelters, have become modern hospitals in historical development. They claim that the concept of scientific hospital developed from the Byzantine period Istanbul hospitals. VIII. by the Umayyad caliph al-Walid. It is emphasized that it was founded in the century. Empress Helena had a hospital established in Istanbul right after Constantine I closed the asclepians. In the letter he wrote to the Archpriest of Galata, Arsakios, the Emperor ordered that an institution be established in each city for the poor and the sick, the expenses of which would be met from the public revenues Empress Irene, VIII. He built a new hospital at the end of the century. Emperor Theophilus (829-842), who took him as an example, ordered the construction of a hospital designed for the patients to benefit from the fresh air carried by the gentle winds and to see the beautiful view of the Bosphorus. He saw the improvement of the city walls and the establishment of this hospital as his most important gift to the people of Constantinople.

From this period, the construction of a hospital became one of the leading services of the emperors. XI. By the 19th century, the number of hospitals in Istanbul had reached 35. These are II. The hospital with the same name was added around the Tessaers Martyrs (Forty Martyrs) Church, which was founded by Isaakios (1185-1195) on Mese (Divanyolu) Street. According to Prokopios; Sampson, VI. He was a benevolent folk physician who lived more than a century ago, dedicating his home to the seriously ill and foreigners.

Evliya Çelebi says that there is a wood warehouse of Matbah-ı Âmire in this area. As a matter of fact, during the cleaning works that started in 2009 next to Hagia Irene, the weights of the giant wood scales depicted in Hünernâme were found. The remains unearthed next to Hagia Irene are thought to belong to St. Sampson Xenon. Sampson (d. 530), a benevolent folk physician, in his house near Hagia Sophia to serve God; He cared for the helpless, the sick, and homeless strangers. After curing Justinian I (527-565), who fell ill for a while, the emperor enlarged and rebuilt Sampson's house and named it after Sampson. Although the house was completely destroyed like other buildings of the city during the Nikea Revolt (11-19 January 532), it was repaired with the generous donation of the emperor. VI. In the 16th-century source, The Life Story of St. Artemios, there is a mention of an operation performed in the eye clinic of this well-organized hospital.

Xenodokyum, or simply xenon, was the general name of social welfare institutions/campaigns with housing for the poor and orphans, a hospital, an old and poor house, an orphanage and a leprosy house. After that, a group of buildings where the sick and the helpless were cared for began to be built. In these settlements built in Istanbul, there were Nosokomeion (hospital where the sick are treated), brefotrophion (hospice for children left on the street), orfanotrophion (orphanage), ptokhokomeion (home for the poor), gerontokomeion (home for the elderly) and VII. Between the centuries, many xenon were made in Istanbul.



Figure 1. Ruins of Ksenon of St. Sampson (<http://www.kalinti-istanbul.com/>)

1. Lazaretto in The Mediterranean Region

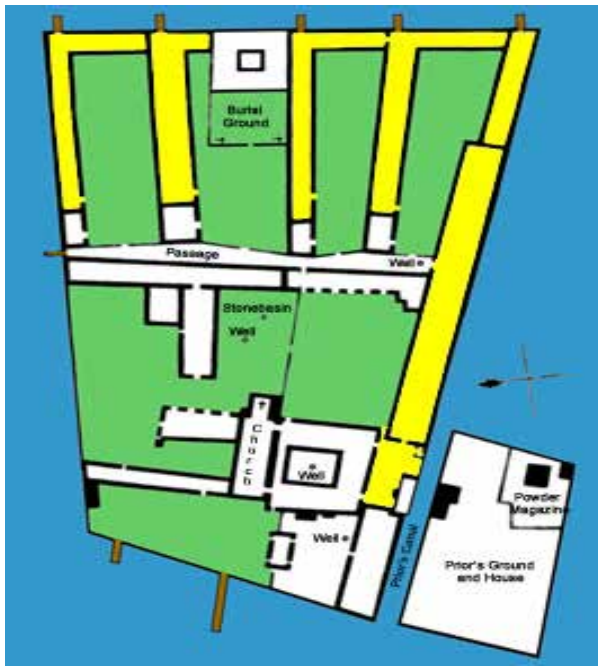


Figure 2. Goods Storage Sheds at Lazaretto Vecchio, Venice,



Figure 3. From Plan found in Howard (1789)

At roughly the same time, the Chinese authorities adopted a similar policy for seafarers and foreign travelers. The Venetians established the first institutionalized isolation system during the plague epidemic, which they called the “Black Death”, and detained ships arriving in the port for 40 days (thus the word quarantine was derived from the Italian quaranta giorni, meaning “forty days”). (one)

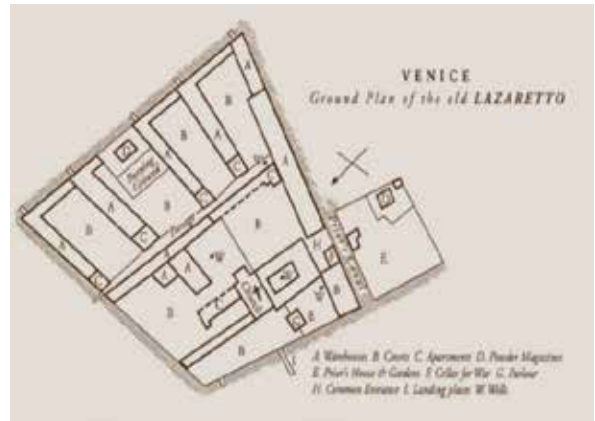


Figure 4. Venetian Lazaretto Ground Floor Plan (Didem İŞLER, Research Assistant, Ankara University)  
In 1403, the lazaretto, dedicated to Saint Lazarus, known as the world’s first maritime quarantine station, was built on an island near Venice. (2)



Figure 5. Venetian Lazaretto Ground Floor Plan (Didem İŞLER, Research Assistant, Ankara University)

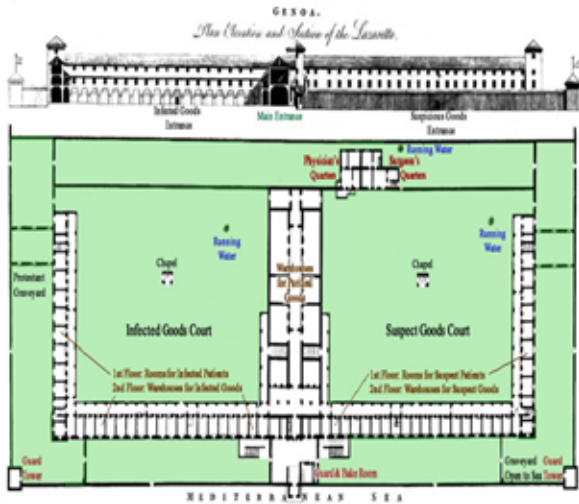


Figure 6. Lazaretto of Genoa

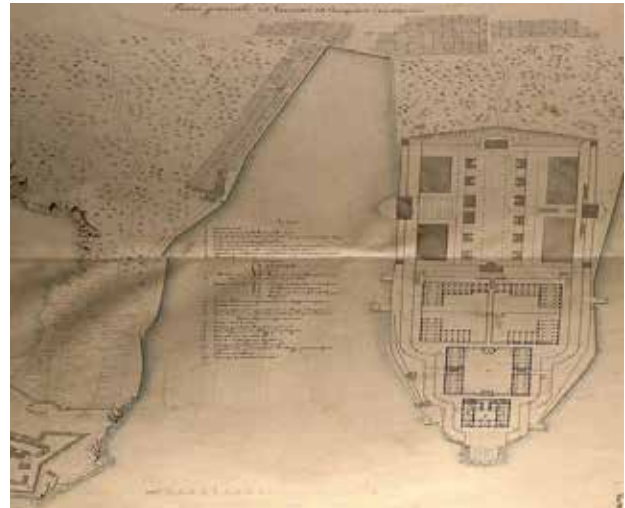


Figure 7. The Lazaretto of Varignano at La Spezia: Floor Plan Ippolito Cremona (1777-1844)



Figure 8. Philadelphia Lazaretto (Independence Hall Association, a nonprofit organization in Philadelphia, Pennsylvania, founded in 1942.)

## 2. Lazarettos In The United States

The American quarantine law was enacted in 1663. The first known American quarantine began in New York City with restrictions on entry to the city to try to stop the smallpox epidemic. In the 1730s, authorities built a quarantine station on Bedloe Island in New York Harbor.

Bedloe Island in New York Harbor was long cleared, re-named, and later the Statue of Liberty was erected on this island. Between 1885 and 1938, authorities felt the

need to isolate those who contracted and carried smallpox at Riverside Hospital on North Brother Island in New York's East River. The famous typhoid carrier, the cook nicknamed "Typhoid Mary", was quarantined there. Lazaretto in Philadelphia was built to prevent the spread of the devastating "yellow fever" epidemics of the 1790s. (2) These epidemics were very severe. Built to include a hospital, offices, and residences on the banks of the Delaware River in Tinicum Township, the 10-acre lazaretto has been quarantining ships, cargo, and passengers arri-

ving in Philadelphia's port for nearly a century. It is claimed that the Philadelphia Lazaretto is the last surviving example of quarantine complexes in America. (3)

In California, San Francisco officials have worked to prevent the cholera disease from turning into an epidemic at the "Ayala Cove" Quarantine Station on Angel Island. This quarantine station was demolished in the 1950s and turned into a state park. Lazaretto in Philadelphia remains the oldest example of quarantine settlements. Tinicum Township, a town of 4,500 people located just south of the Interstate and the Delaware River, is said to have existed structurally in its original form for 206 years on a flat riverbank. Like 19th-century immigrants sweating through a deadly epidemic of yellow fever in the wards of the Lazaretto Quarantine Station, the architecturally impressive exterior of the hospital on the banks of the Delaware River in Tinicum Township, with its red-pressed brick facade, is made of imperfect brick facades and pine pines, designed by carpenters and untouched by architects. evident from the pavement floors. It is understood from the plan scheme that the building is aimed to be completed in a short time in the hands of craftsmen.(4)

There are almost no corridors in the interior layout of the Lazaretto main structure. Therefore, one room is connected to the next room.

Many functions were discussed while preparing the revitalization project. It was concluded that the existing structure is too large in terms of space to be converted into a single house and is unsuitable for planning apartments in it. For those who care about the history and support of institutions and non-governmental organizations that absorb the concept of protectionism, it has been decided to restore the building without being demolished. Tinicum Township, a municipality with a population of 4,500, opposed the use of 70 percent of the land as airport runways and parking lots, and proposed a new use. More than \$8 million was raised for the renovation. As a result of the rehabilitation works, Lazaretto has assumed the identity of a historical building with high prestige, where the town offices have been moved. Lazaretto looked pretty good for a 219-year-old build. There was also a lot of talk about the ramshackle, big, unwieldy buildings in the area, because no one wanted to spend the money

needed to make them useful again.

It is stated that private entrepreneurs such as Eric Blumenfeld, who contributed financially to the restoration of Philadelphia's Metropolitan Opera House and some historical buildings, did not want to get involved in the subject. Lazaretto's own survival also seemed unlikely. The building continued to function as a hospital until 1895, after the federal government took responsibility for the immigrants. It was later bought by the former "Philadelphia Athletic Club", which turned the land into a sports club for its members. The river was full of swamp birds and fish, and a carriage was taking the club members to Lazaretto's doorstep. Club members spent their days hunting and fishing, playing lawn tennis, and enjoying their meals. The club closed during World War I. In 1917 Lazaretto was used as a seaplane base and marina, first by a private owner and then by the US Army. Although Philadelphia Airport provides convenience for the people of Tinicum, the public, non-governmental organizations and the Conservation Board opposed the idea of building an airport.

"We refused to grant a demolition permit," said the Conservation Board, encouraging Tinicum's building officer, Herbert MacCombie, to name the building for City Hall. The town has planned to dedicate part of the ground floor as an exhibition hall for an exhibition telling the history of Lazaretto.

Under the supervision of architects Nan Gutterman and Albert Comly Jr., pool-sized holes in the floors were covered with large oak floorboards. All fireplaces, medical cabinets and wood veneers have been renewed. The building is equipped with three basic modern spaces: toilets, elevators and fire escapes.

According to the architects who carried out the restoration, Lazaretto probably did not look this well-groomed and architecturally impressive even when it opened in 1800. "We refused to grant a demolition permit," said the Conservation Board, encouraging Tinicum's building officer, Herbert MacCombie, to name the building for City Hall. The town has planned to dedicate part of the ground floor as an exhibition hall for an exhibition telling the history of Lazaretto.

It is stated in the records that 10 percent of the city population was lost during the first epidemic and similar numbers of people were lost in the seasonal epidemics that followed. Doctors did not yet understand how the mosquitoes transmit the disease, but suspected that the disease was brought to the city by migratory ships and diagnosed it.

Given the national debate on immigration, the timing is perfect. In its new life as a municipal office building, Lazaretto also emphasizes the concept of being a living monument to a time when he carefully cared for those who came and then sent them to a new life in America.(5)

### 3. Ottoman Empire

The word Tahafuz means protection. While the Quarantine organization was being established in the Ottoman Empire, chief physician Abdulkhak Molla suggested that the word quarantine was not familiar to the public and suggested the expression tahaffuzhane instead of quarantine. This proposal was accepted and the Majlis-i Tahaffuz (Quarantine Council) was established instead of the current Scientific Committee. Places where people with infectious diseases were kept in quarantine, known as "tahaffuzhane" (lazaret-quarantine station), meant protective house. Passengers suspected of an epidemic or contagious disease arriving in the city by land or sea were kept under observation for forty days in order to eliminate this suspicion.

The most important result of the first cholera epidemic that affected Istanbul was the establishment of a quarantine organization in the Ottoman Empire. Payitaht Istanbul during the epidemic protection from the sea came to the agenda, and in accordance with the decision taken at the meeting of the Minister of Galata, Sarım Bey with the embassy translators of friendly countries, to foreign ships coming from the Bosphorus-Istinye Gulf Black Sea; Liman-ı Kebir/Great Harbor-Sarıyer was allocated as a quarantine place for Ottoman Empire ships. Then, quarantine stations and police stations were built on both sides of the Bosphorus. Quarantine inspections of ships and boats departing from the islands and Rumeilian coasts to the Dardanelles and passing through the Mediterranean Strait to Istanbul have begun. A quarantine administration was established under the name of Sihhiye (Conseil Supérieur de Santé), and the first deten-

tion center/quarantine station of the Ottoman Empire became operational in a part of Kuleli Barracks.(6)



Figure 9. Bosphorus Retention Houses

(Nuran Yıldırım: "Istanbul's Meeting with Cholera: The 1831 Epidemic", *Social History*, Issue. 316 (April 2020), 62-66.)



Figure 10. Üsküdar Miskinler Lodge, which was used as a Tahaffuzhane and a house for lepers

(Nuran Yıldırım: "Istanbul's Meeting with Cholera: The 1831 Epidemic", *Social History*, Issue. 316 (April 2020), 62-66.)

Tabhirhouses; disinfect the clothes and belongings of people who suffer from infectious diseases such as cholera, smallpox, chicken pox, plague, etc., The architectural plans of the Tebhirhane buildings are two main venues. The dirty section is the area where the disease-bearing items are brought and put into the oven, and the clean part is the area where the items from the oven are made ready to be delivered to the owner. There is no connection with each other except for the drying machine located in the middle of these two areas. The three disinfection buildings were built similarly to each other in Istanbul. Only Üsküdar Tabhirhane has reached today (Z. Gül ÜNAL, Sümeyye GİDER) (1). In this project, it is aimed to preserve the “tabhir” machines already and give a new function to the restored historic masonry building (Tabhirhouse) which is the only example that still exists in Istanbul.

The drying machines which are used in the cleaning houses and disinfection houses were based on disinfection with 110 degree pressurized water vapor. These stoves were manufactured as mobile and fixed in Europe and had many models (Yunus Emre Tansü).

Üsküdar during the Ottoman period is the place where Surre-i Humayun (formed by the pilgrims who will go to Mecca and Medina every year), is sent off from here with ceremonies.



Figure 11. Üsküdar Tabhirhane Situation Plan.

Historically, pandemia has threatened humanity in three large waves. The first major plague epidemic, also known as Black death in 541, was seen in Constantinople. Plague known as this epidemic had its effect until the middle of the 8th century. Named as Black Death which reappeared in the 14th century.

Gedikpaşa Tabhirhane was put into service on December 18, 1893. The construction of Tophane (Bitpazarı) and Üsküdar (Açıktürbe) Tabhirhouses were also completed in January 1894.

Tophane Tabhirhouse was closed before 1980 and its building was destroyed by a fire. It was planned to be repaired and reorganized by the Metropolitan Municipality in 1991 and used as a Cultural District Mansion. The Gedikpaşa Tabhirhane was closed in the same years, coppersmiths housed in its building for a while, and it was demolished during 1984-1989, it was given to a contractor in return for the land and the office was built. Facing Doğançılar Street and Tebhirhane Street, Üsküdar Tabhirhouse, has reached today with its stove, drying machine and all its venues (2). It was used for disinfection on the Anatolian side in accordance with its establishment purpose. There was a motorized spraying service, applied to homes and schools. As for “tabhir”; means boiling the liquid to a misting, smoking. Arabic word “tabhir”, means “to vaporize, to smoke”.

Especially; this epidemic that spread to the Ottoman Empire through merchants, pilgrims and armies diseases, political and economic troubles in the Ottoman Empire, wars, migration and poverty after lands lost caused an increase. The fatalistic approach of the people against these epidemics is against the practice of quarantine. It caused them to go out and even to revolt. Public health policies in the Ottoman Empire; commissions generated, published instructions, increased importance given to municipal services, hospitalization process and the hospital that will serve not only in the military field but also in the civil field. It manifested itself in the construction of its structures. Especially during the reign of Abdulhamid these policies, which have gained momentum, are important for healthcare services in terms of preventing epidemics. is a second entrance door facing Tebhirha-

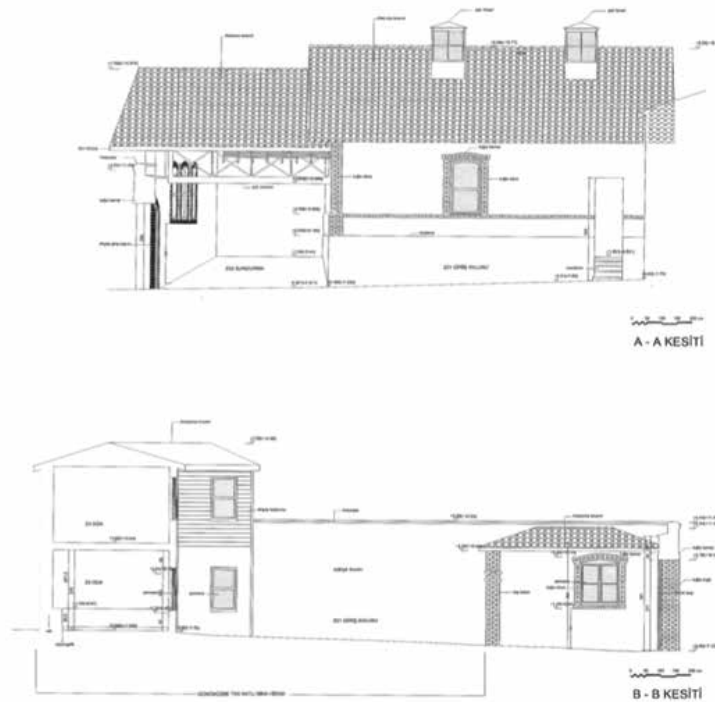


Figure 12. Üsküdar Tebhirhane A-A & B-B Section (DF Arch)

ne Street (4). A courtyard is accessed through the main entrance door, and there is a porch on the left side of the entrance. This porch part receives light from the façade of the Tabhirhane facing Doğançılar Street and on the clean part façade opening to this place. The 9% inclined ramp located under the porch is 105-120 cm high at the level of the clean section door. This ramp provides the transition to the light between the neighbouring building and the service courtyard level at the rear is reached (3).

Courtyard; It is located between the main building and the service building. There is also a staircase to the service courtyard and the dishwasher section at the rear. The single-storey building, which is located on the right side of the courtyard entrance and was called the Service Building which was used as the Istanbul Metropolitan Municipality Veterinary Affairs Directorate, Üsküdar Animal Treatment Center. According to the entrance, there was a chief physician's room, 2 operating rooms and a waiting room. In the single-storey service building on the outer face of the service courtyard at the rear, in order according to the service entrance; masjid, warehouse,

toilets, kitchen, study room were placed. The roof cover on the service building and the service courtyard was combined with the porch in front of the main building's washing part.

The entrance hall is now separated from the main courtyard entrance with a transparent door system and there is a welcoming information desk in this section. Granite (60/60) has been used in the foyer and exhibition areas and in the stairs. Direct connections are provided from the upper foyer level to the exhibition hall and the rear foyer through the corridor space, which is also covered with the main roof. The place where the oven and stove is located is planned to be preserved and used as an exhibition hall. In this space, the existing tile coating preserved completed, the wall plaster renewed; roof cover, carrier purlins and under-ceiling coverings are made compatible with the original. In the light of the restitution decisions, the chimney on the main roof is removed and four roof lanterns are built.





Figure 12. Salacak Quarantine Building Boğaziçi Reservation Houses  
(Nuran Yıldırım: "World Epidemic History", Üsküdar Journal of Culture, Art and Civilization, No.1 (2020), 85-103.)

## CONCLUSION

In general, the epidemic hospitals, which were built in the early days, were built in a smaller area with a single floor to cure the epidemic disease of that time, and because there was no technology in it, the patients were intervened in the form of normal rooms and with the medical supplies available at that time.

As time progressed, additional floors were added to the hospitals that were not destroyed and damaged, and larger areas and sections were added.

Even in hospitals and intervention areas, which are only one floor when viewed, there is a courtyard in front of them.

Vaccination centers produced for any epidemic disease of that period, in accordance with the function and the conditions of that period, consist of a single storey and wooden material.

Today, due to the advances in technology, it consists of many blocks and many floors. There is the use of fire and earthquake resistant materials.

Since the area size of the hospitals built was not very large, patient rooms and patient intervention areas were placed in the rooms in the interior layout.

When looking at the plans and visuals, window openings are used quite a lot in rooms and hospitals.

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