

The Ottoman Arsenal from the Reign of Sultan Bayezid I to the Reign of Sultan Suleyman II (806-974\1389-1566)

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Abstract

This study is high lighting the tersana “arsenal “ beginning with the reign of sultan *Bayezid I* to the end of the reign of sultan *Suleman II* .This research is discussed the political circumstances and how affected its building .Highlighting the divisions of the arsenal during that period. This study focusing the locations of the Ottoman arsenals in Galata, Gallipoli , Sinop, Suez ,Izmit ,Basra , Birecik , Ruscuk , Samsun and Kefken . The Ottoman arsenal and its division . Finally the festivals of lanching ships during that period and conclusion from this study , the research depend on the historical and analytical approach .

Keywords: Ottomans, Tersane (Arsenal) , Sultans , Arsenal division.

Introduction

The Muslims realized that building the fleet was a strategic necessity after the development of their conquests. In the old days, Muslims were afraid from sailing, While internal cities of the Levant were falling easily, the coastal ones were long held, and they figured out that the inner cities subjected to them. The coastal cities were able to resist the Islamic rule with the help of the Roman fleet. Therefore, the expansion the area of the Islamic state was in need of Maritime conquest.

In the beginning, the Muslims relied on the spoils they took from the Byzantine ships and they were the first nucleus of the Islamic fleet. Later, began to build ships and boats in their Tersana, supported by the availability of the materials which used in Ship manufacture such as wood and iron.

This research is highlighting the tersana” arsenal “during the Ottomans period from the reign of *Bayezid I* to the reign of *Suleyman II*. How the political circumstances affected its building, the division of arsenal in that period and the places of those arsenals in the Ottoman empire.

The Study Problem :

Despite the importance of Ottomans period, which took about 600 years and conquered a lot of countries in the world by its fleet , we don't find any study address the Ottoman arsenal in details.

The lack of references about the Ottoman arsenal, its division, and its historical development specially Arabic references .

The Objective of the Study:

This study aims to:

- Highlighting in the Ottoman arsenal from the reign of sultan *Bayezid I* to the reign of sultan *Suleyman II*.
- Research on the places of those arsenals , and how we can use this places as a tourist attractions

The Importance of the Study:

The importance of this study is:

- Focusing on the Ottoman ships and its shipyard
- Introducing tourist ideas to how to make the Ottoman arsenal as a tourist attraction.

I. Historical Background about Ottoman Arsenal

Tersana is a word used by Ottomans to define the place of a complex of docks, various workshops, mosques and stores for ammunition and timber. Its main function was building ships and their repair¹. At the end of fifteen century and beginning of sixteen century referred the shipyards were referred as Liman “harbor”, then called tersana after adopted into Turkish, the words tersane and tersane descended from Italian word darsena and that word came from the Arabic word *dār al-sinā'a* “shipyard”², called “darsenale” by Portuguese³, in Spanish called “arsenal” which was the final form of the word in both European languages and in Arabic language⁴.

In 807\1390 with restoration and reconstruction in Gallipoli, the Ottomans acquired a large shipyard for the first time, to protect their land against the Venetian and Genoese navies. The conquest of Istanbul led the Ottoman state to become an empire, *Muhammed II*⁵ ordered to construct the first shipyard in Istanbul which consisted of “mosque and a haven”, carpenters, sailors and craftsmen from the coastal regions of the empire were brought⁶.

In (920\1514) for the first time the term tersane applied to a shipbuilding yard, in (933\1527) the shipyard in Galata called tersane then grew into the imperial arsenal under the leadership of *Khairuddein Barbaros*⁷ in 1546⁸.

Muhammed “Fatih” established the arsenal in Istanbul⁹. The arsenal in Galata established in (848-850\1444-1446) by *Muhammed II*, completed in (886-918\1481-1512) by *Bayezid II*¹⁰,

¹ Idris Bostan, *Shipyards in The Eastern Mediterranean During The Late 18th and 19th Centuries as Attested in Ottoman Archival Materials*, (Unesco), 1993, p19

² Kate Fleet, Gudrun Krämer, Denis Matringe, John Nawas, and Everett Rowson, *The Encyclopedia of Islam “Three”*, (Brill –Leiden. Boston), 2015, p142

³ Idris Bostan, *Ottoman Maritime Arsenals and Shipbuilding Technology in The 16th and 17th Centuries*, (FSTC Limited), 2007, p2

⁴ رفيق بركات، فن الحرب البحرية في التاريخ العربي الإسلامي، (معهد التراث العلمي العربي، جامعة حلب)، 1995، ص147

⁵ The Sultan *Muhammed II* was born in Rajab 833 \ April 1429, He was the seventh Sultan of the Ottoman empire, when he took power after his father's death All Minor Asia Minor were under his control except some parts from Balkans, Sinob and the Kingdom of Trabzon of the Romans, The Eastern Roman kingdom kept the Constantinople only. The province of Mora was divided between the Venetians and several emirates. After he became the Sultan, he ordered to transfer his father's body to the city of Bursa to be buried there, ordered the killing of his brother named Ahmed and the return of the Serbian princess Mora to her father, and then he prepared to open the marchers from the Balkans and Constantine, see

محمد فريد بك المحامي، تاريخ الدولة العلية العثمانية، تحقيق احسان حقي، (دار النفائس)، 1981 م، ص160:161

⁶ Idris Bostan, *İmparatorluk Donanmasına Doğru : Tersâne-i Âmir'e'nin Kuruluşu ve Denizlerde Açılım*, (Türk Denizcilik Tarihi), Cilt – I, without date, p121

⁷ ⁷ Barbros: meaning the red beard, named by European, and he named also Khairuddin by sultan Selim I, see, Deniz Kuvvetleri Komutanlığı, *Eminent Sailor*, 18-07-2019, https://www.dzkk.tsk.tr/icerik.php?icerik_id=127&tarmir=1&dil=0, last access 13\6\2019, 1:43 AM

⁸ Fleet, Krämer, Matringe, Nawas, Rowson, *The Encyclopedia*, p142

and enlarged and many ships which engaged in Venetian's wars were built their under the supervision of *Kemal Reis*¹¹¹². tersana took the final form in (918-926\1512-1514) during the reign of *Selim I* ,who supported the Ottoman navy by administration 200,000 ducats¹³ , he wanted strengthen the navy, after returning from Chaldiran battle , *Selim I* told his grand vizier *Piri Muhamed* if the Christians occupied the seas by their ships , if their flags waved in the coasts , the reason is our tolerance , thus he ordered to build a big arsenal and five-hundred warships¹⁴. *Selim I* wanted to construct three –hundred tersane , but he died before completing them , the arsenal of Istanbul which *Selim I* constructed was the most important one , then came the arsenal of Gallipoli¹⁵ .

In Galata started the construction of the maritime arsenal , the area was from Kagithane River to Galata , and that was under the supervision of the Admiral *Ja'far*, completed in 1515 ,there were 150 ships built and 50,000 coins spent in this construction¹⁶.

The Ottoman empire had a large number of shipyards in many cities, but the largest was in the Golden Horn , It had a great ability to accommodate a large number of ships, along with the number of workers and manufacturers. The tersane in Istanbul was so famous , the Venetians used to beg the Sultan and they took some of their ships to the Istanbul tersane¹⁷ .The arsenal was surrounded by great walls in order to conceal the activities of the arsenal from outside¹⁸ .

After the Syria and Egypt expedition, sultan *Selim I* strengthened the fleet and there were three- thousand workers working in the shipyard¹⁹ . When *Selim I* conquered Syria and Egypt , he seized important ports there and used those ports in the conquer of Rhodes to stop Saint John Knights . *Selim I*²⁰spent his last years in establishing a tremendous fleet, then during the reign of his son *Suleyman* , the maritime arsenal continued its development²¹ .

⁹ احمد فؤاد ، متولي ، البحرية العثمانية والبرتغالية في القرن العاشر الهجري ، السادس عشر الميلادي على ضوء الوثائق التركية ، (جامعة الإمام محمد بن سعود الإسلامية – كلية العلوم) ، 1980 ، ص381

¹⁰ Fleet, Krämer , Matringe , Nawas , Rowson , *The Encyclopedia* , p142

¹¹ Kemal Reis : he was born in Gallipoli 1440 , he was the uncle of the famous admiral Piri Reis , he came from Karamanli family , he was appointed in the Ottoman naval fleet as “ chief of a troop “ , he had ship called “ Kalite “ . He made great changes on the Ottoman fleet and Ottoman ship building , see

Deniz Kuvvetleri Komutanlığı , *Eminent Sailors* , https://www.dzkk.tsk.tr/icerik.php?icerik_id=127&tarmir=1&dil=0 , last access 5\5\2019 , 1:00 AM

¹² Bostan , *Ottoman Maritime* , p3

¹³ Fleet, Krämer , Matringe , Nawas , Rowson , *The Encyclopedia* , p142

¹⁴ Bostan , *Ottoman Maritime* , p3

¹⁵ متولي ، البحرية العثمانية ، ص 385

¹⁶ Bostan , *Ottoman Maritime* , p4

¹⁷ محمد دراج ، منكرات خير الدين بربروس ، (الأصالة للنشر والتوزيع – الجزائر) ، 2010 ، ص 167:169

¹⁸ Fleet, Krämer , Matringe , Nawas , Rowson , *The Encyclopedia* , p143

¹⁹ Mustafa Gürbüz Beydiz1 , *Tersane-i Âmire'de Çalışan Zanaatkârlar* , (Bilecik Şeyh Edebali Üniversitesi Sosyal Bilimler Enstitüsü Dergisi) , 2017 , p383

²⁰ He was the ninth Ottoman sultan , he called “ *yauvz* “ or the grim , he born in Amasya in 875\1470 , see

The main structure of the arsenal included stores for seventy captains and their ships equipment , the tower of the powder magazine , an oar warehouse , seven store houses , the dungeon of Sanbola , the office of the Grand Admiral , the pavilion of Cirid Meydani and the gates of Şahkulu , the arsenal had great storage facilities which were nails, iron bars ,hemp rope ,copper, suits of sail ,lanterns and artillery pieces ²².

The interest of the arsenal reached to its peak in the fifteen and sixteen centuries during the reign of sultan Selim I and his son Suleyman II.

II. The Maritime Arsenal Subdivision:

The maritime arsenal during Ottoman period had many sections , for example : in Galata arsenal , there were 114 sections in 1522 during the conquest of Rhodes , in 1534 there were 92 sections and in 1557 there were 123 sections , tile , lead and brick used in the construction of this maritime sections ²³ .

II.1 The cellars

In the main maritime arsenal (Tersane-i Amire)there was only one cellar ²⁴ at the beginning , then in 16th century became doubled , one of them the leaden cellar , where kept nails, copper pots, hemp rope , leaden plates , sails , barrels , awning cannons ,papers and lanterns , the other one used for preserve timber necessary to ship-building ²⁵ .

II.2 The Chambers

In the maritime arsenal there were many chambers for example: in the main maritime arsenal (tersane-i Amire) . There were chambers for the Grand Admiral located at the Hall of Audience , other chambers for maritime arsenal Stewart , maritime arsenal Agha and maritime arsenal Supervisor, in these chambers there were pillow , basin , jug , cotton , round tray , large bath-towel , dinning –table... etc ²⁶ .

A number of Leading Orientalists , *The Encyclopedia of Islamic* , Edited by : C.E . Bosworth , E . van Donzel , W. P Heinrichs and the late G. Lecomte , (Brill – Leiden) ,1997 ,Volume IX , p127

²¹ Bostan , *Ottoman Maritime* , p4

²² Fleet, Krämer , Matringe , Nawas , Rowson , *The Encyclopedia* , p143

²³ Bostan , *Ottoman Maritime* ,p8

²⁴ Cellar : it was a room used as storage located under the ground floor of building , or it was a house used for storage , see

Cambridge Dictionary , *Meaning of Cellar in English* ,

<https://dictionary.cambridge.org/dictionary/english/cellar#cacd-1-1-1> , last access 24\5\2019 , 5:47 AM

²⁵ Bostan , *Ottoman Maritime* ,p8

²⁶ Bostan , *Ottoman Maritime* ,p8

II.3 The Hall of Audience

The Hall of Audience was for dedicated for the Administrative Affairs, as well as, the chamber of the Grand Admiral and the maritime arsenal Stewart. The first established one in the reign of *Muhammed II*, later a new one added in the reign of *Selim I*²⁷.

II.4 The Studios

In the maritime arsenal specially the main one (*tersane-i Amire*) there were many branches of art like : mop workers , carpenters , calligraphy ,saw-makers and boat-makers²⁸.

II.5 The Dungeon

In this place the slaves and criminals were locked. It was also called “ *forsa* “ and “ *Sanbola* “ divided into sections , in one section lived the shipbuilding workers , another section used as a hospital ,surrounded by high walls and no window, beside the Dungeon²⁹ there were bakery , mosque , bathhouse , kitchen and fountain³⁰.

II.6 The Maritime Arsenal Garden

It was established for the first time by *Muhammed II* , it was the place where the sultan walked from time to time , in the Maritime Arsenal Garden there were numerous chambers , bathhouse , a hall of fountain and bathhouse³¹.

According to this investigation the Ottoman arsenal from the reign of sultan *Bayezid I* to the reign of sultan *Suleyman II* content six main sections.

III. Locations of the Ottoman Maritime Arsenals

III.1 The Imperial Arsenal In Galata (*Tersane-i Amire*)

It was built at the Golden Horn . This shipyard met the needs of Ottoman empire for centuries , it was called “ *tersana- i Amire* “³² . it was stretching from the *Kaghthane* stream to *Galata*³³.

²⁷ Bostan , *Ottoman Maritime* ,p9

²⁸ Bostan , *Ottoman Maritime* ,p8

²⁹ Dungeon : it was a dark underground cells , which prisoners kept in , the first prisons built by Byzantines in Istanbul , the first prison built by Ottomans was during *Muhammed Fatih* 's reign , by his grand vizier , see *Hürriyet Daily News , Underground Cells Ottoman Dungeon* , June 02,2012 , <http://www.hurriyetdailynews.com/underground-cells-ottoman-dungeons-22155> , last access 24\5\2019 , 6:23 AM

³⁰ Bostan , *Ottoman Maritime* ,p9

³¹ Bostan , *Ottoman Maritime* ,p9

³² *Cengiz Toraman , Batuhan Güvemli , Fatih Bayramoglu , Imperial Shipyard (Terane – i Amire) in Ottomam Empire in 17th Century : Mangement and Accounting* , (*Spanish Journal of Accounting History*) , December 2010 , No.13 , p2

The maritime activities transferred from Gallipoli to Istanbul in 1515 and the arsenal of Galata became the central base , the expenses of the arsenal of Galata were 1,662,377 coins ”according to book belonged to years 933-934\1527-1528 ”³⁴ .

It was built at first by Sultan *Muhammed Fatih* , *Bayezid II*³⁵ take care about it , *Selim I* strengthened this arsenal³⁶ . it was developed during the reign of sultan *Suleyman Kanuni*³⁷ and his son *Selim II* , it considered the main base of the Ottoman navy , it became the most famous shipyard during the sixteen century , in the years of *Barbross Khairuddin* helped in maintain the domination of Ottomans in Mediterranean³⁸ .

The Ottoman arsenal contributed in the industrial development , the imperial arsenal in Istanbul contained shipyards , storehouses , dry docks , hospital , mosque ,iron foundries “ for making anchors “ and prison all located in the Golden Horn³⁹ . the number of docks in the middle of sixteen century increased to be 140⁴⁰ .

The needs of the from timber were brought from mountainous areas along the Black Sea and Marmara , and from its neighbor regions which had forests with good quality of timber such as Iznik , Iznikmid and Sabanca . The transportation of the wood from Iznikmid to Istanbul was done by ships from the port of Izmit. During the sixteen century when Ottomans had large scale naval campaign , most of the wood in the Imperial arsenal was from the large woodland along Marmara Sea⁴¹ .

III.2 The Gallipoli Maritime Arsenal

It was built at Gallipoli⁴², its construction began in 1390. it was the oldest and the primary Ottoman maritime arsenals , the port composed of two pools , two towers built in the entrance of

³³ Gábor Ágoston ,Bruce Masters, *The Encyclopedia of the Ottoman Empire* , (Facts On File - New York) ,2009 ,p559

³⁴ Bostan , *Ottoman Maritime* ,p5

³⁵ Sultan *Bayezid II* was born in December 1447 , he was the elder son of his father *Muhammed II* , he had a struggle with his brother Gem about the succession of the throne , see

V. J. Parry , *Bayezid II Ottoman Sultan* ,(Encyclopedia Britannica) , May 22, <https://www.britannica.com/biography/Bayezid-II> , last access 22\4\2019 , 10:00 PM

³⁶ *Türkiye Diyanet Vakfı İslâm Ansiklopedisi* ,(Tanzimat - Teveccüh Ankara) , TDV,2011,40,c.16, p513

³⁷ He is the son of *Selim I* , he acceded the throne in September 1520 and his age was 25 years old . there are three different dates for his birth : in November 6, 1494 , April 27,1495 and April or May 1496, see

A number of Leading Orientalists , *The Encyclopedia of Islamic* , Edited by : C.E . Bosworth , E . van Donzel , W. P .Heinrichs and the late G. Lecomte , (Brill – Leiden) ,1997 ,Volume IX , p833

³⁸ Turkish Culture Foundation , *Ottoman Sailing Ships*, From Galleys To Gallons , <http://www.turkishculture.org/military/naval/ottoman-ships-758.htm> , last access 23\5\2019 , 2:25 AM

³⁹ Fleet, Krämer , Matringe , Nawas , Rowson , *The Encyclopedia* , p144

⁴⁰ Ágoston , Master , *The Encyclopedia* , p559

⁴¹ Eyüp Özveren , Onur Yıldırım , *Procurement of Naval Supplies During The Sixteen Century : Venetian and The Ottoman Tersane Copared* , (Middle East Technical University – Ankara) , April 2006 , p7,9

⁴² Gallipoli : in turkisk Gelibolu , it lies on a narrow peninsula which the Dardanelle opens into the Marmara Sea ,west-south of Istanbul , it considered as a naval base to the Ottomans in their conquest to Europe ,see

the port to be closed by a chain , there were shipbuilding yards , fountains to provide the ships with water , equipment for preservation depots and bakeries for ships crackers , it had 30 pools in 1526 ⁴³ .

The arsenal of Gallipoli remained the main naval base of the Ottomans until the second decade of 16th century ⁴⁴ . It was assigned to the navigation affairs during the first years of the Ottoman Empire. After the conquest of Istanbul took the second rank in importance after the Galata arsenal , but it kept its importance until *Suleyman Kanuni* ⁴⁵ . the arsenal of Gallipoli arsenal worked to help the activities of the Imperial arsenal ⁴⁶ .

III.3 The Sinop Maritime Arsenal

It was located in the Black Sea , thus it considered the only natural port in the Black Sea coast with resources for shipbuilding for its neighbors , the arsenal used the forests of the Sinop ⁴⁷ to build the ships and sent the trees to Istanbul ⁴⁸ . the arsenal of Sinob helped the activities of shipbuilding of the Imperial arsenal⁴⁹ .

It was the biggest third maritime arsenal in the numbers of the shipbuilding after the Galata and Gallipoli arsenals , in 1566 the numbers of ships which built in Sinop arsenal were 15 galleys ⁵⁰ .

III.4 The Suez Maritime Arsenal

The Suez ⁵¹ arsenal started shipbuilding when the Portuguese came to the Black Sea and helped the Mamluks by building this arsenal before the Ottomans' conquest of Egypt , in 1513 20 ships

The Editors of Encyclopedia Britannica , *Gallipoli " Turkey "* , (Encyclopedia Britannica) , Dec11,2018 , <https://www.britannica.com/place/Gallipoli-Turkey> , last access 13\6\2019 , 2:30 AM

⁴³ Bostan , *Ottoman Maritime* ,p9:10

⁴⁴ Gelina Harlaftis , Carmel Vassallo , *Research in Maritime History NO.28 "New Directions In Mediterranean Maritime History "* , (St. John,s , Newfounded) , 2004 , p162

⁴⁵ Bostan , *Ottoman Maritime* ,p10

⁴⁶ Harlaftis , Vassallo , *Research in Maritime* , p162

⁴⁷ Sinob : it is Sea Port on the Bkack Sea coast from southern side , according to old legend , Sinob founded by Amazon , who named the city for their queen Sinova , it refounded in 7th century BC , it was taken by Ottomans in 1214 AD and incorporated into the empire of Ottomans in 1458 AD , see

The Editors of Encyclopedia Britannica , *Sinob " Turkey "* , (Encyclopedia Britannica) , Sep30,2013 , <https://www.britannica.com/place/Sinop> , last access 25\5\2019 , 8:25 AM

⁴⁸ Bostan , *Ottoman Maritime* ,p10

⁴⁹ Harlaftis , Vassallo , *Research in Maritime* , p162

⁵⁰ Bostan , *Ottoman Maritime* ,p10

⁵¹ Suez : called Al-Suways in Arabic , it locate north of Egypt , it is a port at the head of Suez Gulf , after Ottoman conquest of Egypt , it developed as a naval station , it was a major port for Arabia , Yemen and India trade , now it remains as a naval and trade Centre , see

The Editors Of Encyclopedia Britannica , *Suez " Egypt "* , (Encyclopedia Britannica) , May 06,2014 , <https://www.britannica.com/place/Suez-Egypt> , last access , 6\11\2019 , 4:16 AM

were built by the Ottoman seamen. After the conquest of Egypt by Ottomans in 1517 ,Yemen in 1526 and Aden 1538 , the Suez arsenal became the naval base for the Red Sea and the Indian Ocean ⁵² . It was considered as an important naval base for sultan *Selim I* during the conquest of Yemen ⁵³ , the camels were day and night carrying timber and other equipment from Cairo to Suez to build the ships and boats, there were 80 ships built and sent to Yemen , all of this led to restoration of the castle and fresh water wells in Suez ⁵⁴ .

The activities of the Suez arsenal changed from time to time , sometimes increase and sometimes decrease , according to the years of expeditions ,in 1525 there were 6 small galleys for war(*bastarda*) , 3 other small galleys called (*Kalyata*) and other 8 galleys built in this arsenal , in 1531 there were 80 ships built in Suez maritime arsenal 30 of them were galleys ⁵⁵ , in other resources there were 10 big galleys , 40 small galleys 10 small “ *fusta* “ and 20 big “ *nāo* “ built in Suez arsenal ⁵⁶ . the Suez port was placed under the supervision of Ottoman Qubodan , who was directly subordinate to the Ottoman sultan and the northern coasts were beyond the control of Egypt’s governor⁵⁷ .

III.5 The Izmit Maritime arsenal

The maritime arsenal of Izmit located near the Hunkar palace . It was repaired in 1554 in general and in 1556 its four gates were rebuilt . The arsenal had timber cellar and shipbuilding yard . The presence of forests in this place made Izmit suitable place for ship-building ⁵⁸ . Izmit arsenal was early established and rebuilt by Ottomans and the ships which were built there formed the first nucleus for the naval forces and the first Ottoman shipyard built there was it in 1327 ⁵⁹ .

III.6 The Basra Maritime Arsenal

When Ottoman conquest Egypt 1517 , they could have access to the Red Sea and Indian Ocean after they acquired the Suez arsenal ,and when they conquest Basra in 1538 they acquired a new

⁵² Bostan , *Ottoman Maritime* ,p10:11

⁵³ محمد أبو ليلة ، كل رجال السويس فدانليون في وضح النهار " الجزء الثاني " ، (المجموعة 73 مؤرخين) ،
آخر دخول 2019\3\23 ، 12:01 ص <http://group73historians.com/-/1068> ،

⁵⁴ عصام ستاتي ، السويس التي لا تنسى " الجزء الأول " ، (روز اليوسف) ، 23 أكتوبر 2013 ،

<http://www.rosaelyoussef.com/news/2662/%D8%A7%D9%84%D8%B3%D9%88%D9%8A%D8%B3->

، آخر دخول 2019\5\23 ، <http://www.rosaelyoussef.com/news/2662/%D8%A7%D9%84%D8%AA%D9%89-%D9%84%D8%A7-%D8%AA%D9%86%D8%B3%D9%89>
ص 12:17

⁵⁵ Bostan , *Ottoman Maritime* ,p11

⁵⁶ Metin Kunt, Christine Woodhead , *Suleyman the Magnificent and His Age : The Ottoman Empire in the Early Modern World* (Routledge) ,2013 , p65

⁵⁷ مرفت أسعد عطا الله ، ترسانة الإسكندرية ، (الأهرام اليومي) ، 24 يوليو 2015 ،

آخر دخول 2019\5\23 ، 12:30 ص <http://www.ahram.org.eg/NewsPrint/416030.aspx> ،

⁵⁸ Bostan , *Ottoman Maritime* ,p10

⁵⁹ Turkish Culture Foundation , *Ottoman Sailing Ships, From Galleys To Gallons* ,

<http://www.turkishculture.org/military/naval/ottoman-ships-758.htm> , last access 23\5\2019 , 2:10 AM

base and port⁶⁰. Basra throughout Sixteen century worked as Ottoman naval base for the expeditions against Portuguese in Indian Ocean⁶¹. The lumber which brought to Basra⁶² maritime arsenal floated down during the season of high water the Euphrates from the port of the Bireich River⁶³.

A Portuguese traveler, who visited the maritime arsenal of the Basra in 1563, said that there were galleons-type ships and 5 newly –built galleys, in the sixteen century there was grand admiralty⁶⁴. The fleet which prepared in Basra maritime arsenal helped Ottoman empire to reach India and Far East⁶⁵.

III.7 The Birecik Maritime Arsenal

The Birecik⁶⁶ maritime arsenal, the date of its establishment is unknown, but it was active in the beginning of sixteen century, in 1522 there rowboats were built⁶⁷.

III.8 The Ruscuk Maritime Arsenal

This arsenal was activate after the conquest of Hungary when the navy formed at the Danube, there were the Hungarian Sayka, small galleys, Frigates and Ustuacik boats which suitable for the Danube⁶⁸. the Ruscuk arsenal worked to supplement the work in the Imperial arsenal⁶⁹.

III.9 The Samsun⁷⁰ Maritime Arsenal

⁶⁰ Bostan, *Ottoman Maritime*, p11

⁶¹ Ágoston, Master, *The Encyclopedia*, p79

⁶² Basra : in Arabic Al- Basrah, its locate in southeastern of Iraq, on the west bank of the Shatt Al –Arab, Basra founded by caliph Umar I in 638, Basra troops fought at Nahavand 642 the Sasanian Persians, and conquered Iran in 650, see

The Editor of Encyclopedia Britannica, *Basra “ Iraq “*, (Encyclopedia Britannica), Jan20, 2016, <https://www.britannica.com/place/Basra>, last access 13\6\2019, 2:40 AM

⁶³ Dejanirah Couto, Rui Manuel Loureiro, *Revisiting Hormuz “Portuguese Interactions in the Persian Gulf Region in the Early Modern Period “*, (Harrassowitz Verlag), without date, p34

⁶⁴ Bostan, *Ottoman Maritime*, p11

⁶⁵ Turkish Culture Foundation, *Ottoman Sailing Ships, From Galleys To Gallons*, <http://www.turkishculture.org/military/naval/ottoman-ships-758.htm>, last access 23\5\2019, 2:33 AM

⁶⁶ Birecik : it locate on the left bank of the Euphrates, the Ottoman empire built a small river ships in Birecik shipyard, the area of Birecik province is 835 km, surrounded by Syria from the south, Halfeti from the north, see Birecik Ticaret Ve Sanayi Odasi, *Birecik History*, <https://www.bireciktso.org.tr/en/birecik-city/birecik-history/>, last access 24\5\2019, 8:59 AM

⁶⁷ Bostan, *Ottoman Maritime*, p11

⁶⁸ Bostan, *Ottoman Maritime*, p11

⁶⁹ Harlaftis, Vassallo, *Research in Maritime*, p162

⁷⁰ Samsun : it is located north of Turkey, it is considered the largest city on the Black Sea coast from the south, it was found after Sinob, in 7th century BC, named Amisos by Byzantines and renamed after that by Turkish as Samsun, it was taken by sultan Bayezid I in 14th century, after it was burnt by Genoese, see The Editors of Encyclopedia Britannica, *Samsun “ Turkey “*, (Encyclopedia Britannica), Dec11,2014, <https://www.britannica.com/place/Samsun-Turkey>, last access 24\5\2019, 8:13 AM

In this arsenal there were ships with the hemp fiber and hemp rope built. This arsenal was used after Sinob⁷¹. Most of the hemp which the Ottoman empire needed to produce rope brought from Samsun⁷².

III.10 The Kefken Maritime Arsenal

The leaders of this maritime arsenal were eight volunteers and appointed for held exempt from the tax of avariz, this arsenal was inherited⁷³.

The locations of the Ottoman tersane were found in ten locations during that period.

IV. Festivals for Launching of Ships:

Launching of ships was done with great ceremonies held, the ships and boats built in the land then they were opened to the sea, some of them built in the pool⁷⁴.

The day before launching ship, rice and the other kinds of foods were prepared, on the day of the ceremony, the officials arrived to the shipyard about 2 to 3 hours before the ship was set for launch, then came the Janissaries then Shaykh al-Islam and the grand vizier and at last, the sultan came shortly after that⁷⁵.

In the ceremony of the Ottoman empire sheep was sacrificed⁷⁶, the sacrifices were done after sailing ship to the sea, and prayers performed⁷⁷.

After launching of the ships to various government officials and shipyard employees hilt it was given, the gifts were posted on the boats and shared between the engineer, master, architect and workers of the ships after the ceremony, the ceremonies were made for the big ships and for the smaller ships such as sandalwood, the sultan didn't attend all ceremonies, only that for galleons sometimes the grand vizier participated, sometimes it was merely a captain⁷⁸.

⁷¹ Bostan, *Ottoman Maritime*, p11

⁷² Turkish Culture Foundation, *Ottoman Sailing Ships, From Galleys To Gallons*, <http://www.turkishculture.org/military/naval/ottoman-ships-758.htm>, last access 23\5\2019, 2:28 AM

⁷³ Bostan, *Ottoman Maritime*, p11

⁷⁴ Şenay Özdemir, *Osmanlı'da Gemilerin Denize İndirilmesi*, (Mersin Üniversitesi, Fen-Edebiyat Fakültesi), 2010, Vol. 8, No.1, p 16:17

⁷⁵ Özdemir, *Osmanlı'da Gemilerin*, p18

⁷⁶ Laura Motta, *Nerwegian Escape Inaugural: How a New Cruise Ship Launches*, (Shermans Travel), Jan15,2016, <https://www.shermanstravel.com/advice/heres-what-happens-when-a-new-cruise-ship-launches>, last access 21\5\2019, 3:27 AM

⁷⁷ Özdemir, *Osmanlı'da Gemilerin*, p18

⁷⁸ Özdemir, *Osmanlı'da Gemilerin*, p18

Conclusion

The Ottoman arsenal was at first a necessity for shipbuilding in the reign of sultan *Bayezid I* , and then developed into an integrated society .

The Ottoman arsenal included a mosque for prayers, a prison for the punishment of the sinner, a storage facility, chambers for the employees, hall of audience, an office for the captain and even a garden for walking the sultan.

The arsenal consisted of many craftsmen such as carpenters, blacksmiths and sailors, the Ottoman arsenal included many non-Turkish and Arab nationalities for building ships .

The main arsenal was first at Gallipoli and then moved to Istanbul.

The interest of the arsenal reached to its peak in the fifteen and sixteen centuries during the reign of sultan *Selim I* and his son *Suleyman II*.

The Ottoman arsenal's locations at this period in “ Galata, Gallipoli , Sinob , Samsun , Kefken , Rusucik , Birecik ,Basra , Izmit , Suez “ .

This study could help the tourist by establishing museums for the Ottoman arsenals include photo for the old ships which built in these arsenals on their old places and use it as a tourist attraction

This study could help in build the arsenals in this days by making it an integrated society .

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Fig 1 : represents Suez arsenal

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Fig 2: partial view of the imperial naval arsenal from Golden Horn

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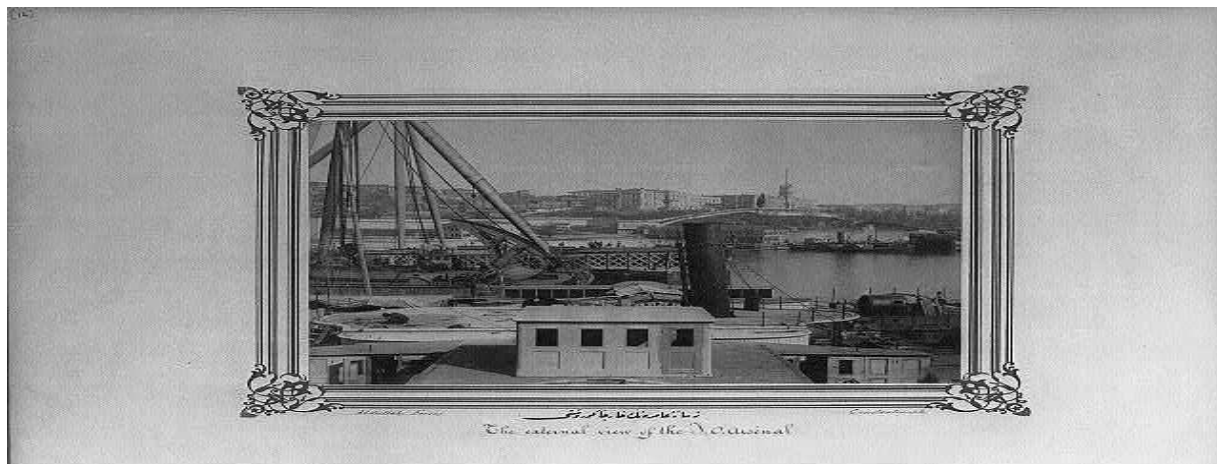


Fig 3 : represents the exterior view of the imperial arsenal

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Fig 4 : represents general view of the imperial arsenal

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ملخص البحث

تناولت هذه الدراسة الترسانة العثمانية منذ عصر بايزيد الأول حتى نهاية عصر سليمان الثاني "القانوني"، كما تناول البحث شرح تاريخي لهذه الفترة، وتناولت الدراسة مباني الترسان خلال هذه الفترة الزمنية ومحتوياتها، كما ألفت الضوء على مواقع هذه الترسانة في الامبراطورية العثمانية والتي وجدت في جالاتا وجاليبولي، سينوب، سامسون، كفكان، روسك، بيريك، البصرة، إيزمت، السويس، كما تحدثت الدراسة عن الاحتفالات التي تقام في الترسانة العثمانية بعد بناء السفن الجديدة والمراسم المتبعة ورجال الدولة الذين يحضرون هذه المراسم بدأ من السلطان .