

# THE ALAMO 18-POUNDER CANNON

RESEARCH TO REPLICA

Kolby Lanham - Alamo History Researcher  
Ernesto Rodriguez - Alamo Curator

## *Abstract*

The Alamo Trust, Inc. Collections Team endeavored to undertake a cannon replica project to help visitors better understand the artillery used during the Battle of the Alamo as well as the immensity of the fort at that time. The initial phase of the work is focused on the southern portion of the Alamo, along the south wall, Palisade, and southwest corner. The accounts of the early days of the siege speak of the 18-pounder cannon playing a prominent role in the response. The 18-pounder was lost to history sometime after the Battle. Unlike many of the other cannons that are already in the Alamo Collection, considerable research had to be conducted to determine what this cannon looked like and where it originated. Previously, researchers believed that the 18-pounder was British-made and originally manufactured to handle 18-pound ammunition. The current research has led us to several new conclusions that will change what was commonly believed about the cannon. Using period photographs and modern technology, the Collections Team has determined that the cannon was roughly 7 feet long and weighed nearly 3,000 pounds. Unique markings on the 18-pounder in the historical images revealed that this gun was actually a Swedish-made Finbanker from Finspång, Sweden. Although the measurements gathered from the photographs indicate that the cannon would have used 18-pound ammunition, the relatively short length and the light weight indicate that this cannon likely started its life as a 9-pounder and was later bored out to accommodate an 18-pound cannonball.

## *The Alamo 18-Pounder Historical Research*

The Militia Reduction Act of March 31, 1835 solidified the importance of the Alamo in the history of the Texas Revolution, as it called for not only the reduction of militias, but also for all artillery to be sent to a central location. The Alamo served that purpose. Defense of San Antonio (then Béxar) was crucial to the 1836 Revolution due to its strategic location along vital trade routes. Protection of the town made the Alamo fort an important military foothold for the region. Overall, the garrison had twenty-four cannons, eighteen of which were mounted and ready for use (Newell 1838). It is often questioned as to why the Alamo defenders didn't abandon the fort when the situation seemed untenable. Part of the answer is that the cannons and all the supplies for them couldn't be transported easily. The Alamo defenders likely decided the best course of action was to stay in the Alamo and use the artillery to try to hold the town.

Due to the importance of the cannons at this site, Alamo Trust, Inc. has moved forward on research in order to cast replicas to be displayed on site. The goal of the project is to create high quality, historically accurate working replicas of all the cannons known to have existed in the vicinity of the Alamo's Main Gate and Palisade during the battle of 1836.

Past and present archival research provides significant historical details about the guns positioned at and near the Main Gate during the Battle of the Alamo. The Alamo Collections Team has used this information to determine approximately where the approximate location of each gun was located and approximately, their caliber, what they looked like, and if we have any in our collection to inform casting of replicas that can be placed in their likely locations during the Battle. The production of accurate replicas, which would be displayed in their likely locations, would create a great new place for interpretation on the site and would provide visitors with an immersive experience.

During the initial process of the project, the Collections Team identified which cannons should be researched. Initially, the cannons chosen to be part of the project consisted of nine cannons located along the south wall and Palisade during the Battle. A separate endeavor to recreate an interpretation of the southwest corner coincided with the research project. At that time, the 18-pounder was added to the collection of cannons to be researched and replicated. The replica of the 18-pounder and carriage would then be placed at the southwest corner as part of the interpretive exhibit.

Research for the 18-pounder focused on determining the cannon's approximate weight, length, country of origin and approximate diameter of the muzzle. Because the 18-pounder no longer exists, the research had to be done using primary source material, photographs, and computer-generated renderings.

### *Condition and Identifying Marks*

In the several photographs we have of this cannon, it is missing its cascabel and trunnions. The muzzle of the cannon is also missing in these photographs. These photographs of 18-pounder have been compared to the guns the Alamo has in its collection as well as contemporaneous guns that were also buried around the same time, shortly after the Battle of the Alamo. This cannon, like the others in the Alamo collection, was made of iron. It would have been exposed to the elements over its lifetime and likely had some level of pitting and corrosion. The historical record has shown that cannons of manufactured during the period before the Battle varied in size and design due to natural variations in the casting process and individual style of the foundry. Based on the present research, this cannon seems to have been roughly 7 feet long. This measurement matches modern renderings, overlays of the historical photos and the two 9-pounder cannons currently in the Alamo collection (Figure 1).



Fig. 1: 9-pounder cannon in the Alamo collection. It closely matches the measurements of the 18-pounder.

## *Historical Analysis*

Prior to this research being conducted, assumptions had been made that the 18-pounder was manufactured in England. The history of iron cannon making in Europe dates to the mid-16th century, and the clear front runner in this early technology was England (Brinck 2020). By the 17th century, England was the most successful cannon maker in the world. Government regulations and trade restrictions slowed the export of the cannons to mainland Europe, which opened up the market to new cannon manufacturers, such as the Dutch and the Swedish. The Swedish copied many of the early English cannon designs, and over time they perfected the design and the technology (Brown 2020). These perfected Swedish cannons were called Finbankers, named for the foundry in Finspång, Sweden, in which they were manufactured (Figure 2). Foundries in Finspång manufactured cannons from the late 16th century to the early part of the 20th century (Persson 2000). Because of the similarities in the cannons, there's often confusion on which country made the historic cannon from this time period.

Ruth Brown, an artillery expert for Basiliscoe Museum Consultants and former Senior Curator for the United Kingdom's Royal Armouries Museum, has identified a number of characteristics that led to the current belief that this cannon is a Swedish-made Finbanker.

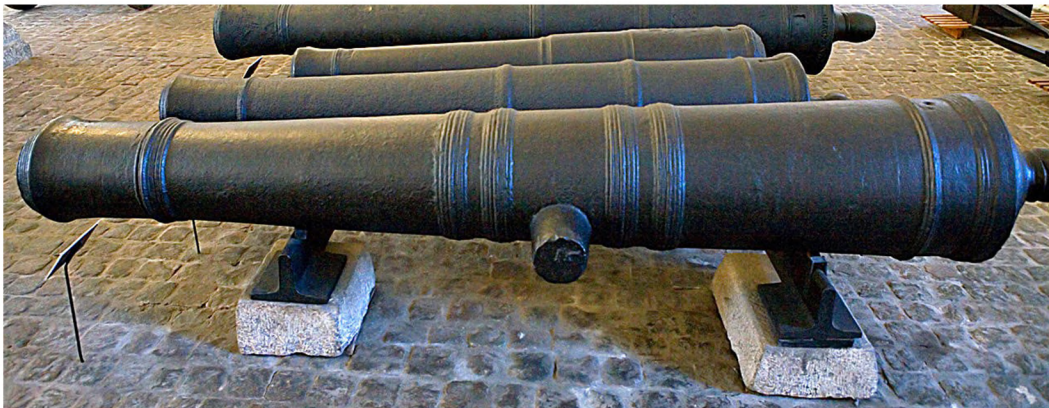


Figure 2: Example of a Swedish-made Finbanker on display at the Danish War Museum, National Museum of Denmark <https://pbase.com/maritimmodellklubb/image/77643566>

One of the characteristics of the Finbanker is wide reinforcing rings of equal width that are set and centered on either side of the trunnions. A second trait is a long muzzle with a significant swell near the opening of the cannon. After discussing these characteristics and the historic photographs of the 18-pounder cannon with Brown, the Alamo Research Team concluded that the 18-pounder exhibits both of these characteristics and also roughly matches the approximate weight and length of a Finbanker cannon from around 1660-1700 (Brown 2020, de Vries, 2020).

These Finbanker cannons slowly made their way around the globe, and some of them ended up in Texas, several of these cannons can be found in the Alamo Collection and in Goliad Texas. In 1835, conflicts between the Mexican government and the people of Texas were slowly turning into a revolution. By September of 1835, the newly formed Texan Army was in desperate need of artillery. The 18-pounder left New Orleans aboard the Columbus and arrived October 11, 1835, escorted by the New Orleans Greys, a militia unit that fought at several battles throughout the Texas Revolution (Brown 1999).

Upon arrival to the Texas coast, the 18-pounder was offloaded at Dimmit's Landing on the northeastern portion of what is now Lavaca Bay (TSAL, 2020) (Figure 3). At the time, the 18-pounder was unmounted and thus not fit for service. General Stephen F. Austin made several pleas for it to be brought to Béxar for the Battle of Béxar in December of 1835, however it was nearly a month before wheels could be manufactured and brought to Béxar from Dimmit's Landing (Woodrick, 2017) (Figure 4).

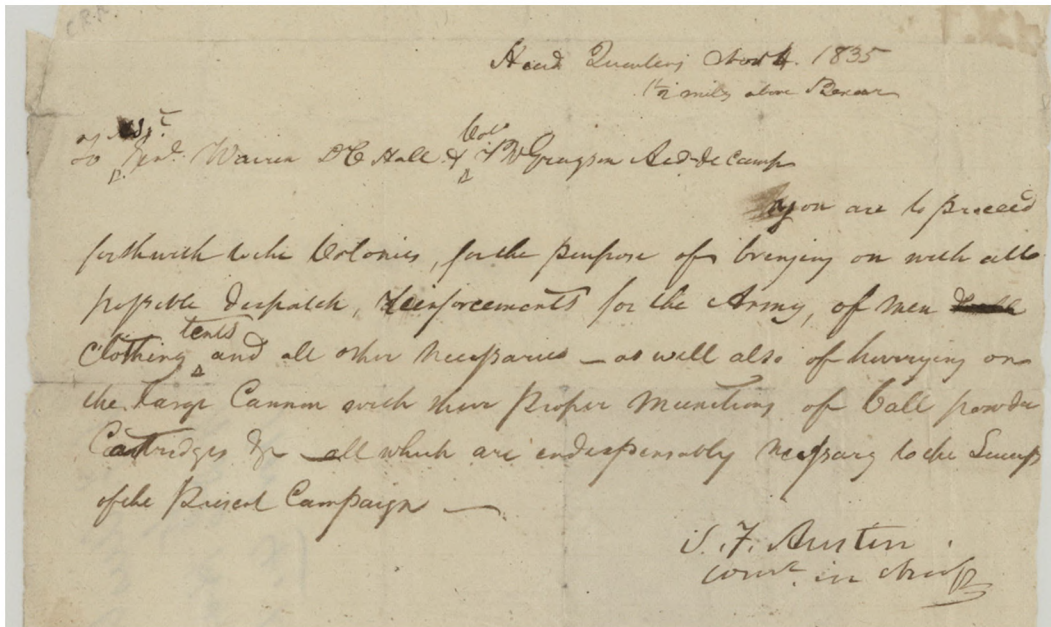


Fig. 3 Letter from Stephen F. Austin to Adjunct General Hall and Colonel Grayson, November 4th, 1835. "...as will also of hurrying on the large cannon with the proper munitions of ball, powder and cartridge" Phil Collins Texana Collection at the Alamo.



Defenders had shoved their priceless personal belongings inside the cannon. Charles T. Smith, a local Confederate veteran, purportedly broke the muzzle off using rope, acid, and a sledgehammer (San Antonio Express News 1917). When it was discovered that the gun was empty, it was cast aside. The City of San Antonio had the 18-pounder moved to San Pedro Springs Park, where it was placed on a mount and remained for many years before it disappeared around 1917 (Woodrick 2017).



Fig. 5: The 18-pounder lying in Alamo Plaza, with the muzzle pointing west. Circa 1858 (Institute of Texan Cultures).



Figure 6: Fernando Raven with 18lber sometime during the 1890s. Note the heavy scarring on the cannon near the middle of the gun. This area is where the trunnions would have been attached. They sit along the midline of the gun, typical of Swedish cannons of the day (Peterson 1969) these are widely known characteristics of a Swedish made Finbanker cannon from around 1660-1700 (de Vries, 2020). (Source: <https://www.edwardsaquifer.net/spspring.html>)



## Location Within the Fort 1836

The 18-pounder cannon was situated in the southwest corner of the Alamo Compound. This area was used as living quarters prior to the battle (Hansen 2003). These quarters were likely filled with dirt, and a large ramp was built to allow the cannon to be placed on the roof. This portion of the fort had a direct line of sight with the town of Béxar.

## Carriage Type and Mounting

Cannon carriage types varied greatly depending on the cannon's nation of origin and in what capacity the cannon was being used. The Alamo's 18-pounder would have likely been placed on a naval carriage (Fig.7). Naval carriages were short stocky carriages that were made to be housed in the narrow spaces of a ship's hold. While these carriages were perfect for a naval environment, they were ill-suited for overland use.

When the 18-pounder was offloaded at Dimmit's Landing, it would not have had a carriage to go along with it. There's some speculation that a makeshift carriage was made to transport the cannon to Béxar (Woodrick 2017). We know that cannon wheels were transported by John Little (Fig. 4) and were used to bring the 18-pounder from Matagorda to Béxar.

It is possible that the cannon was mounted on an older carriage that had wheels that needed to be replaced. The handbill mentions wheels being made, but it does not mention an axle or other items that would be used to transport the cannon. One interpretation of the request is that there was a carriage available and the 18pounder was mounted on that carriage and then the new wheels were installed.

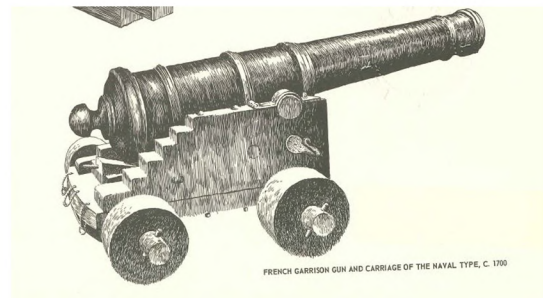


Fig. 7: French naval carriage similar to the Spanish carriages of the time

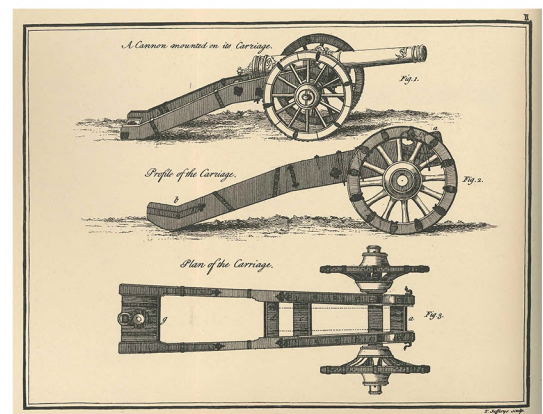


Fig. 8: Instruccion Del Artillero, Con Laminas

## *Reproduction Research and Analysis*

As this cannon is lost to history, we have had to rely on photographs from the 1800s and 1900s to determine the approximate length, weight, and dimensions. When the cannon was moved to San Pedro Springs Park in the 1890s, it was put on an ornate limestone plinth, which is still present in the park today (Figures 10 and 11).

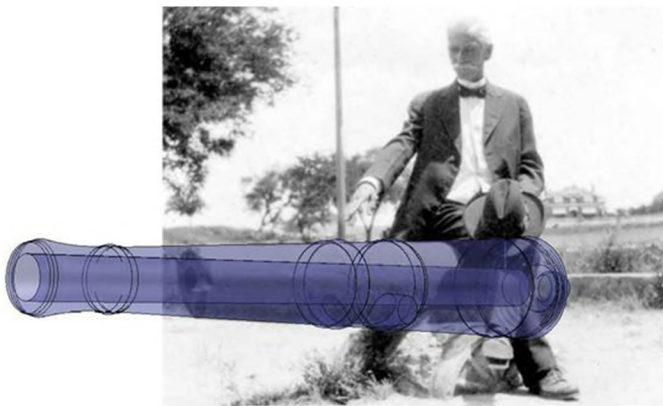


Fig. 10: SRO Architects. 18-pounder 3D model shown as transparent blue overlaid on top of the Fernando Raven photo

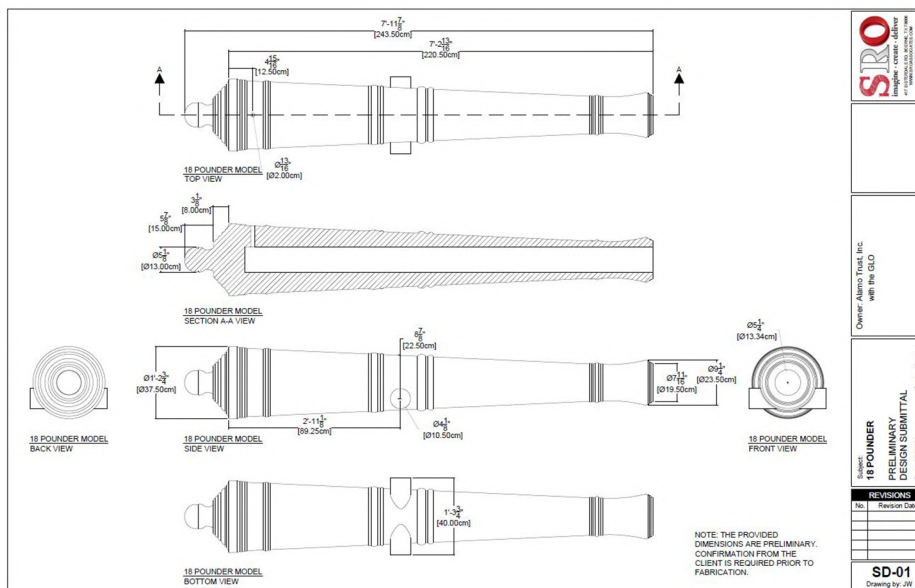
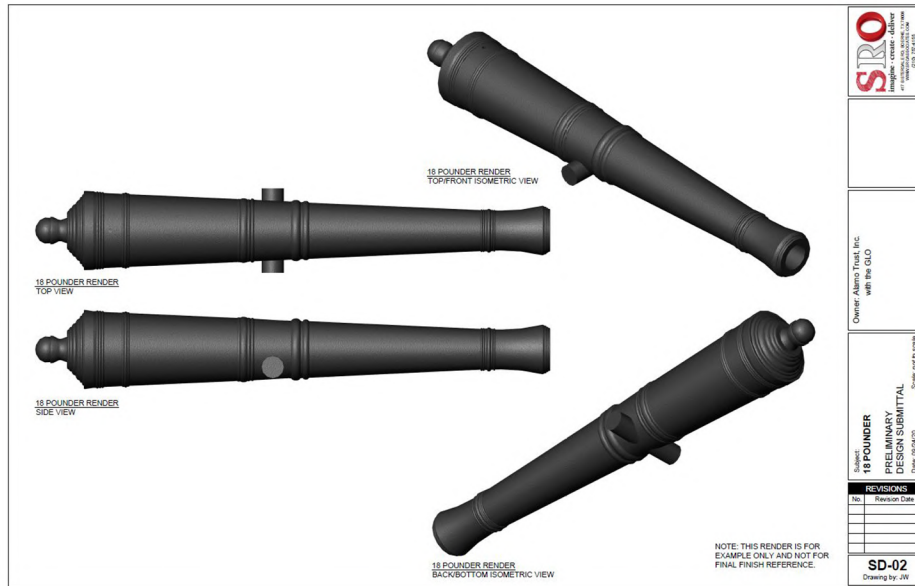


Fig. 11: <https://www.edwardsaquifer.net/spspring.html>

SRO Associates, Inc., a San Antonio-based architectural firm, has used the few historic photos known of the cannon to obtain approximate measurements to use in the reproduction. SRO's analysis of historic photos comparing to the existing plinth have indicated that the 18-pounder was roughly 7 feet in length (including the broken muzzle) and 1 foot, 3 inches in diameter at the widest portion near the rear of the cannon.

According to SRO's measurements and the use of archival information concerning similar cannons, this gun weighed between 2,000-3,000 pounds, which is roughly 1,500 pounds lighter than other 18-pounders of the time period. The length is also much shorter than a standard 18-pounder cannon. According to Muller (1768), the average 18-pounder designed for land use in the mid to early 1700s was 10 feet long. The weight differentiation indicates that the cannon was made for the commercial market. The commercial market used much lighter cannons on their merchant vessels due to the high cost of heavy military cannons and to reduce the weight of a ship's armament (Peterson, 1969). All of this information points to the fact that this cannon started its life as a much smaller caliber cannon, likely a 9-pounder, and was later bored out to an 18-pounder. The boring of smaller caliber cannons to larger calibers was commonplace in the 16th and 17th centuries (Muller, 1768). The boring process

was needed because cannonballs wore out firing grooves as they moved down the barrel. These grooves made the cannon less accurate over time, so the cannons were re-bored to larger calibers (Muller, 1768). According to Gerry de Vries, a researcher and artillery expert for the Cannon Association of South Africa, cannon boring was often done because it was far cheaper to bore out a 9-pounder to the diameter of an 18-pounder than it would be to buy a whole new 18-pounder cannon. By 1865 bored-out cannons were deemed obsolete and unsafe due to modern advances in the quality of gun powder (McConnell, 1988).



Figures 12, 13: SRO Architects. This approximate length shown in these renderings allows us to narrow the weight of the gun and the caliber.

## *Summary and Conclusion*

During the course of this research, it became evident that the information was contrary to what had been widely accepted. Alamo Trust convened a panel of experts and researchers in Texas Revolutionary artillery to review these new findings and provide advice on the Alamo cannon replica project. These advisors were presented the information contained in this report and asked to offer their input. After reviewing the information, the advisors concurred with the determination that the 18-pounder was in fact a Swedish-made cannon rather than manufactured in England as originally believed. In addition, as a result of using the model created from the historical photos, the group were convinced that the cannon had initially started as a 9-pounder but was later bored out to fire 18-pound ammunition. All were aware that this research has changed the assumption that the 18-pounder was the largest cannon on the grounds during the Battle of the Alamo. Although large, the 18-pounder famous for the shot fired in response to Santa Anna is actually less in weight and length than originally believed and is smaller than at least one other cannon in the Alamo Collection that was on the site during the Battle. The new information may change what was known, but it does not diminish the importance of this particular cannon on the site. With all the information gathered and utilizing the 3-D model created by SRO, The Alamo is having a replica of the 18-pounder cast to be placed in the approximate location of the southwest corner, as it was during the Battle of the Alamo.

## Bibliography

1. Newell, Chester. *History of the Revolution in Texas, Particularly of the War of 1835 & '36*. New York, Wiley and Putnam, 1838.
2. Republic Claims: Texas State Libraries and Archives. (n.d.). Retrieved September 08, 2020, from <https://www.tsl.texas.gov/apps/arc/repclaims/viewdetails/63342>
3. Woodrick, J. (2017). *Cannons of the Texas Revolution*. Lexington, KY
4. Jenkins, J. H. (1937). *Papers of The Texas Revolution*. AUSTIN.
5. Hansen, T. (2003). *The Alamo Reader: A Study in History*. Mechanicsburg, PA: Stackpole Books.
6. Republic Claims: Texas State Libraries and Archives. (n.d.). Retrieved September 01, 2020, from <https://www.tsl.texas.gov/apps/arc/repclaims/viewdetails/36894>
7. Brown, Gary. *Volunteers in the Texas Revolution: The New Orleans Greys. 1st Ed.*, Republic of Texas Press, Taylor Trade Publishing, 1999.
8. Smith Charles T., "56 years and the Alamo Again Sees the Boys March to the Front", San Antonio Express News, 1917
9. Brinck, N., Kempen, G. V., & Opdebeeck, J. (2020). *Kanonnen van Nederland: Nederlands geschut en andere oude kanonnen in Nederland = Guns of the Netherlands: Dutch cannon and other old guns in the Netherlands*. Amersfoort: Rijksdienst voor het Cultureel Erfgoed.
10. Ruth Brown, Personal Communication, August 23, 2020.
11. Persson, Mats. "A Very Brief History of Swedish Arms Manufacturing." Firearms in Sweden, 18 Feb. 2000, [www.gotavapen.se/gota/sverige/history\\_se.htm](http://www.gotavapen.se/gota/sverige/history_se.htm).
12. Gerry de Vries, Personal Communication, August 28, 2020.
13. Muller, J. (1768). *A treatise of artillery: Containing I. General constructions of brass and iron guns used by sea and land ... To which is prefixed an introduction, with a theory of powder applied to fire-arms. The second edition, with large additions, alterations, and corrections*. By John Muller. London: Printed for John Millan.
14. McConnell, D. (1988). *British smooth-bore artillery: A technological study to support identification, acquisition, restoration, reproduction, and interpretation of artillery at national historic parks in Canada*. Ottawa: Supply and Services Canada.

15. Peterson, H. L. (1969). *Round Shot and Rammers*. Harrisburg, PA, PA: Stackpole.
16. The Alamo Cannon (Cannons?). Retrieved September 02, 2020, from <http://www.edwardsaquifer.net/sp-spring.html>
17. Instruccion Del Artillero, Con Laminas (1845), New York, NY
18. "Finbaker", 8-pdr 1683, 8-pdr 1692 photo - Maritim Modellklubb photos at pbase.com. (n.d.). Retrieved September 03, 2020, from <https://pbase.com/maritimmodellklubb/image/77643566>
19. Tegning af kanontyper. (n.d.). Retrieved September 02, 2020, from <https://samlinger.natmus.dk/THM/asset/23976>
20. 18 pr gun and carriage - Finnbaker Type Made of iron. (n.d.). Retrieved September 03, 2020, from <https://collections.royalarmouries.org/object/rac-object-5700.html>

### *Acknowledgments*

The Alamo Collections Team would like to thank the following for their assistance in the completion of the 18-pounder research and replica project:

Alamo Trust, Inc.

Texas General Land Office

James Woodrick, Author of *The Alamo Artillery and Texas Artillery Before 1835*

Jim Jobling, Lab Manager at Texas A&M University's Conservation Research Lab

Gregg Dimmick, M.D., Author of *Sea of Mud: The Retreat of the Mexican Army after San Jacinto, An Archaeological Investigation*.

Donald Frazier, Ph.D., Director of The Texas Center at Schreiner University in Kerrville

Craig Covner, Author & Alamo Society Member

Mark Lambert, Deputy Director for Archives & Records at the Texas General Land Office

Ruth Brown, Artillery Expert, Basiliscoe Museum Consultants