The 1622 Swivel Gun

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A marine artillery collection of differing materials and nationalities, and periods ranging from the 1500’s to the early 18th century, finds its home at the MFMHS museum in Key West. One small cannon, recovered from near the wrecks of Nuestra Senora de Atocha and Santa Margarita is of a design that would have been most popular during the century before the 1622 tierre firme flota sailed. Nonetheless, it does seem to have played an interesting, documented role in the events surrounding the disaster that struck the Florida Straits on September 6 of that year.

The gun is made of many separate pieces of iron wrought together and built up much like a wooden cask. Four iron staves form the basis of a bore and a series of alternating hoops and sleeves was then wrapped around them as binders to form the finished barrel. Gaps can be found between some of the laminations, providing hazardous vents for hot gas and flame before they could be normally discharged via the muzzle. It was a rail-mounted, breech-loading swivel type weapon that balanced and pivoted on a yoke. It was aimed by using the upturned tiller as a handle. The bore flares from 2.25 inches (5.71 cm) to 4.12 inches (10.47 cm) indicating this cannon was used to fire a broad pattern of scatter shot. It weighs just over 114 pounds (51.9 kg) and has an overall length of 40.5 inches.
Similarly designed Spanish pieces can be found at the Museo del Ejercito in Madrid where they are given the name *falconete* and are dated from the late 1400’s to the early 1500’s (Anonymous, 1956). Other examples of this style of gun have been found in Sweden and Denmark (Howard, 1987) as well as from an early 17th century wrecksite off Cornwall, England (Simpson, Davis, Hall, Larn, 1977). Another has been recovered from a Spanish shipwreck site on the Little Bahama Bank, which is believed to date from the early to mid-16th century (Armstrong, 1994).

Writing in his *Seaman’s Dictionary* of 1644, John Manwayring provides a description of swivel cannon, which he called *Murderers*:

“(These) Are small iron or Brass Pecies with Chambers: In Marchant-men they are most used at the Bulkheads of the fore-castle, half-deck, or steeridge; and they have a Pintell, which is put into a stock, and so they stand and are traversed, out of which they use Murdering-shot to scower the Decks, when men enter, but Iron Murderers are dangerous for them which discharge them, for they will scale extremely, and endanger their eyes much with them, I have known divers hurt with shooting them off.”

Another mariner’s manual from the late 16th century, gives the warning that if iron artillery is to be used, only the cast-iron variety is reliably safe (Garcia de Palacio, 1587). Obviously, these descriptions are far from ringing endorsements for wrought-iron breech-loaders, and any mariner using these books for guidance certainly was not being encouraged to outfit a ship with them. From this, it can be inferred that these descriptions were written during the end of the era for this particular class of artillery.

By reviewing the circumstances around the known examples, certain patterns about these guns become evident. They saw their greatest popularity during a period that carried from the last part of the fifteenth century on into the first half of the seventeenth. They were used throughout Europe and into at least Spanish America. Their use as marine weapons is confirmed by not only their design and written descriptions of their use, but also through recoveries from more than one shipwreck site.

Such a pattern fits the scheme for the 1622 *flota*, but trying to ascertain exactly which ship the gun could have come from requires some detective work by searching through the contemporary documents concerning the fleet and its loss, as well as an examination of the archaeological evidence.

The gun was found more or less equidistant from the main deposits of the *Atocha* and *Margarita* at just over two miles from each, but tending more along the northwest scatter trail of the *Atocha*. The lists of guns placed onboard each of the galleons makes no mention of wrought iron artillery, but rather describes complements of twenty bronze muzzle loading cannon for the *Atocha* and eighteen for the *Margarita* (Lyon 1975a). Considering that 1622 was near the end of the span for swivel guns, logic would hold it unlikely that such new and top-of-the-line ships as those galleons would have been outfitted with them. No related artifacts, such as other swivel guns, breech chambers, or the wedges to hold chambers in place have been discovered, making this gun a unique, individual find from an area not quite on either known wrecksite.

With the evidence swinging away from this gun having originated from either of the lost treasure galleons, just how did it come to be on this particular area of the ocean floor? A strong correlation between survivors’ accounts of the wrecks’ immediate aftermath and the archaeological evidence provide the most likely answer to this question. In a letter of January 10, 1623 the Marquis de Cadereita relates the account of Don Bernardino de Lugo, Captain of the troops onboard *Santa Margarita*, which contains the following relevant passage:

“... he found himself floating and swimming on a plank until five o’clock in the afternoon. Then, since the weather had moderated, a shallop from a Jamaica ship picked him up. Having entered into the shallop, he buoyed in a cannon a yard and other poles with a pennant wrapped around them to serve as a mark and signal of the place where the two galleons had been lost. Thus they might be found and the treasure and artillery aboard could be recovered (Lyon, 1975b).”

In other words, he marked the area of the two wrecks with a buoy anchored by a cannon. The discovery of the swivel gun between the two wrecks, and the unusual shackle and chain rig found with it, meshes nicely with the described placement and construction of de Lugo’s improvised marker. The original context for the gun appears to have been onboard the shallop (ship’s boat) from what was most likely the *Santa Cruz*, a ship of 100 tons, and the
only one in the 1622 flota known to have travelled to Jamaica (Lyon, 1975c). The outdated and dangerous gun from a small, utility vessel would have served perfectly as a marker weight that could risk being lost or damaged in the sea.

Other than its location upon discovery, there is no evidence to support the theory that this swivel gun is a part of the scattered wreckage from either of the Atocha or Santa Margarita. Rather, it seems clear that this cannon represents the first attempt by a quick thinking survivor of the tragedy to mark the location of the sunken galleons for later salvage. Unfortunately, subsequent storms quickly followed and carried away the buoy that this gun anchored, not only leaving it lost at the bottom of the sea, but further destroying what remained of both the Atocha and Margarita. For another 364 years this piece had to lay quietly where it had been dropped before finally being able to reveal its tortuous journey from the 16th to 20th centuries.

**BIBLIOGRAPHY:**

Anonymous
1956 *Catalogo del Museo del Ejercito, Tomo IV*. Edciones ARES, Madrid.

Armstrong, Douglas R.

Garcia de Palacio, Diego

Howard, Frank

Lyon, Eugene
1975a *AGI Indiferente General 1144* (Translator).

Simpson, K., H. Hall, R. Davis, R. Larn