The Geilston Carronades

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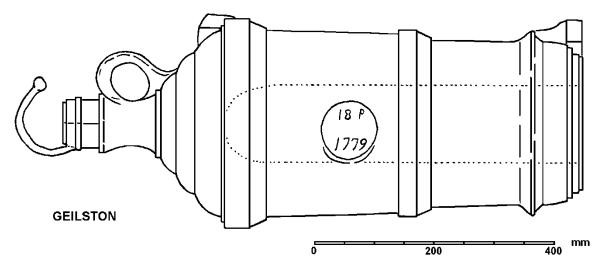
There are two early pieces of ordnance on display in the gardens at Geilston House near Helensburgh. They are short stubby and squat. The two guns are made of high quality grey cast iron and horizontal seams show that they were made in two-piece moulds. The guns appear to be identical except that weathering has left the markings on the right trunnion of Gun 1 more readable than those on Gun 2.





Illus 1: The guns in Geilston garden. Left – gun 1; right – gun 2.

The incuse inscription on the right trunnion of Gun 1 can be confidently read as "18 P/ / 1779"; the same can very faintly be made out on Gun 2. The left trunnion of Gun 1 is more worn, but a single line placed near to the top was read some time ago as "3024-" and appears to be the serial number of the manufacturer. Nothing can be read on the left trunnion of Gun 2. From this it is evident that the calibres of the guns were 18-pounders, which agrees with the diameter of the bore which is a fraction over 5ins. Both were manufactured in 1779. The five digit serial number beginning with 302 conforms with the sequence of numbering given to the ordnance manufactured by Carron Company in this year.



Illus 2: Scale drawing of the Geilston guns.

The absence of the Carron name also occurs on the "carronade" on display at



Illus 3: Carronade on the walls at Bamburgh castle.

Castle Bamburgh Northumberland, which is SO called because of archival material kept in the library there. It was supplied by Landell and Chambers of Newcastle at a cost of £24 and was delivered by boat to Fenham Flatts, just north of the castle. It was then carried by horse and cart and arrived at Bamburgh 14 Castle on September 1779. lt was supplied with 24 rounds of shot, 66 pounds of gun powder and a carriage. The total sum was £37

and 10 shillings, with an additional 12 shillings charged for the horse and cart. Carron Company went on to sell all of their guns as part of a larger packet that included powder, carriage and the tools used for loading.

1779 was at the very beginning of a 25 year design evolution of these weapons and the final form was completely different from the original. The later guns survive in large numbers, but these early ones are rare and have not been properly studied.

It is said that Robert Melville's inspiration for the carronade was a howitzer that he observed in action whilst in Ireland. That weapon was made of brass and when fired at a low elevation the recoil was too severe for the mounting. Melville realised that if the body had been made of cast iron it would be heavier and so would absorb a significant part of the recoil. This was the design concept for the carronade. Early models were infamous for the power of their recoil and so new features had to be incorporated in order to lessen it. Professor Anderson of Glasgow University and Professor Robison of Edinburgh University appear to have had an input not only into the type of shot and shell used, but into the basic weapon itself. John Smeaton

contributed to the form of the truck or sledge used as the mounting. No drawing of the early carronades survives and given the additional work that we know to have been undertaken it would be unwise to assume that individual features were original.

A major effort seems to have been put into modifications to reduce the amount of powder required, and hence the recoil. One solution was to adopt the use of a smaller curved back or chamber at the breach end of the bore. Neither of the Geilston guns has this chamber – but this may be because it was only introduced later.

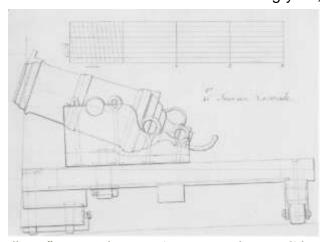


Illus 4: Gun 1 at Geilston.

Both guns possess sights on the front. would have been required These because the guns are very short and so it was not possible to use the barrel to line them up. The back of the vent/touch hole is slightly raised and has a nick in it allowing it to be used as the rear sight. The 1780 carronade recently recovered off the coast of St Augustine Florida has similar sights, though the front one is less This gun, made within a pronounced. vear of the Geilston guns, is also significantly longer. Like the two Geilston guns it possessed a tiller on the breach.

So, given the shortness of the Geilston guns were they carronades? In 1779 Carron made other ordnance of a similar type. We know that between 1772 and 1793 Carron Company produced 1,890 swivel guns and 724 cohorns. Between 1772 and 1775 it made 24 howitzers and 348 mortars.

Using the Carron Company records Coruana calculated the lengths of carronades over the years. For 1778 he gives the length of an 18-pounder carronade as 24ins, this increased to 28ins in the following year, and was 40ins by 1793 (see Carronade



Illus 5 "18 pounder Trunnion Carronade on a Slide Mounting" from the Admiralty Collection in the Royal Museum at Greenwich, dated circa 1790, from Lavery 1987.

article). The length of the Geilston guns is 28ins from the muzzle to the rear reinforce and so agrees with that of a carronade of this period.

Carronades of this period were used almost exclusively by the mercantile marine - the Royal Navy refused to take Carron Company's products. would be an amazing coincidence for the Geilston guns to be identical if they had not been together since their manufacture - they are evidently old friends. This suggests that they saw service together and were decommissioned at the same time consistent with having been placed on

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board a ship. The Honourable East India Company is known to have bought carronades and so that seems like a probable source. The Geilston guns are light in relation to their calibre and once moved from the ship they would have been suitable for use by a mobile army in India. Carronades were remarkably effective as antipersonnel weapons and were often used to cover blank points in forts' defences. So it is probable that they were associated with General Thomas Geils who served in the army of the East India Company from 1766 to 1798. Upon his return to Scotland he bought the estates of Geilston, Ardardan and Ardmore.

This would agree with the tradition recorded by Edith Kenny in 1898 that the carronades had been taken into battle by General Geils. According to Charlotte Geils they were used by General Geils for "signalling to his people in Greenock. But on Ardmore being sold to Sir Andrew Noble in 1890 they were removed to Geilston where I'm told they still are." In 1779, when the guns were made, the carronades were still referred to as "Gasconades." There were two reasons for this appellation – firstly, the manager of Carron Company was Charles Gascoigne and he had a big hand in the project, and secondly, the word already existed in the English language – it meant to brag and bluster like someone from Gascony. That was an appropriate because the gun made a lot of bang for its size, and that is what you need from a signal gun!

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Bibliography

Bailey, G.B. 2018 The Carronade (Falkirk Local History Society website)

Coruana, A.B. 1997 The History of English Sea ordnance 1523-1875. Vol 2: 1715-1815,

The Age of the System.

Lavery, B. 1987 The Arming and Fitting of English Ships of War, 1600-1815