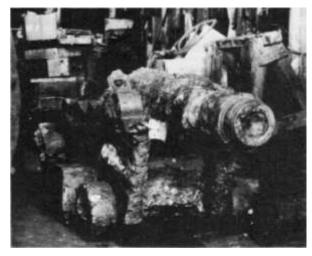
# THE FALKIRK CANNON

### **By Colin Hendry**

[Colin Hendry worked for the National Museum of Scotland, latterly at the Museum of Flight, East Fortune.]



Illus 1: The cannon as it appeared on arrival at St Monans, Fife, shortly after recovery from the sea.

The National Museum of Scotland in Edinburgh has in its possession a small ship's cannon that was recovered from the seabed off the May Island in the Firth of Forth estuary in February 1968. As ships' cannon go, it is a fairly small type, having an iron barrel only 123 cm long and bored for a 4-pound roundshot. The cascable button is surmounted by a breeching loop for securing the gun from recoil during action, this giving the barrel the same appearance as the heavier pieces of the 18th and early 19th centuries.

The original wooden carriage also survives with three of its four wooden wheels (trucks) still in good condition.

The cannon was accidentally hoisted up from its resting place by a St Monance fishing trawler, the "Dewy Rose" during a routine trawling sweep and taken in to port where it lay until its future could be decided. Having been found at sea it automatically came under the jurisdiction of the Receiver of Wrecks.

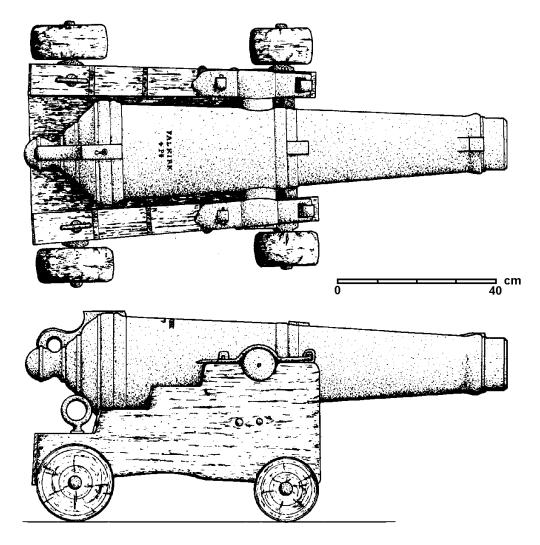
After initial enquiries it was hoped that the cannon might remain in St Monance, but if so, it would have had to remain out of doors as no suitable refuge was available. As time went by, it became quite apparent because of the cannon's condition this request by the St Monance authorities would have to be rejected and specialised conservation sought. alternative suggestion was accepted; that it be handed over to the National Museum of **Antiquities** Edinburgh



Illus 2: The barrel after conservation.

conservation and safekeeping. As all this talking was going on, the cannon was still sitting in a shed at the James Miller boatyard in St Monance being constantly wetted down to prevent it drying

out too quickly and the inherent salts causing irreparable damage. In March 1968, the cannon was transported to the Conservation Laboratory where treatment began. Although it was in remarkably good condition considering its duration under water, there was considerable corrosion and encrustation caused by sea life. Only once this was removed were the details of manufacture discovered. On the top of the reinforce, just forward of the base ring are marked the place of manufacture "FALKIRK" and the size specification of the piece, "4 Pr" denoting that it fired a roundshot of four pounds in weight, this being relative to the size of the bore. The weapon was dismantled into its component parts and each part treated.



Illus 3: Complete cannon and carriage drawn after conservation and reassembly.

The carriage had been quite eroded by the action of the sea and abrasive particles, but still retained its solidity. Believed to be of elm, it measures 74 cm by 45.5 cm and has four steps, the top one retaining both cap squares of iron for holding fast the trunnions. The two iron loops for the side tackle on the first step are also present; this is for securing the gun to the bulkhead when not in action.

The solid wooden trucks likewise were reasonably undamaged, with the exception of one, which subsequently had to be replaced. The front two trucks are 17 cm in diameter, smaller than the 20 cm of the rear two.

The cannon is not, as might be suspected from its size, a "carronade", although the muzzle bears similarity to many of that type. Carronades do not usually have trunnions like those employed on this weapon; instead they have a loop under the barrel through which passes a bolt securing it to the carriage. It is not a naval piece either, but is in fact representative of a general group of small weapons made to private order for the protection of merchant vessels. The manufacturing of these weapons was executed in part by the Falkirk Foundry, which was a completely different concern from the nearby Carron Iron Works - the originators of the carronade. The products of the Falkirk Foundry may, however, have been influenced by the longer established Carron Company. The foundry, from its opening in 1810, produced many articles ranging from large items like parts for bridges to small household ornaments such as inkwells. On the ordnance side, they are known to have produced cannons of sizes from 4 pounders up to 18 pounders especially for use aboard mercantile ships. They also produced some 16,000 tons of artillery ammunition for use in the Crimean War, this, however, being some years later than the period with which we are concerned here. There are few records pertaining to the Falkirk Foundry's ordnance manufactory, but by design alone we can roughly date the cannon's manufacture to between 1820 and 1850.

There is a similar piece in the Tower of London Armouries classified as an "Iron Carronade, 3 pdr and carriage". This gun has been mounted on a modern carriage with all four trucks identical in size. Other differences between this and the "Falkirk" cannon, besides the size of bore, are: (a) the method of attaching the cap squares - they are not hinged at one end on the Tower example but retained at both ends by wedges and, (b) there are no sighting "squares" on top of the barrel. Small cannon of this nature, although as already stated, not technically carronades, would likely have enjoyed the same ballistic qualities. Carronades were taken into service from 1779 and were made in sizes from 6 pounders to 68 pounders. Their particular advantage was in their capability of accurately roundshot considerably projecting of large calibre ranges 400-600 yards, the normal distance at which vessels of war engaged. This peculiarity was due to the small windage of these weapons. This means that the shot used closely fitted the bore, not allowing it to bounce off the bore walls on firing as excessively as other cannons of the period. When such occurred, a spin was imparted on the shot determined by its last impact on the bore. This in turn made the ball curve in a completely undetermined direction ie: If the shot's last ricochet was on the right side at the muzzle it would exit to the left. The ball, however, would spin to the right and thus execute a wide curve to the right. By similarly hitting off the top or bottom of the bore at its exit, range would be effected. The considerable reduction of this deficiency made the carronade a most popular shipboard weapon.

It is not likely that the cannon was part of a shipwreck but rather that it came to be in its location on the sea bed as a result of having broken loose from its side tackle in rough weather and rolling overboard. There are no known wrecks of merchantmen, contemporary with the cannon, in the immediate area. The only wrecks there are those of the "Pallas" and the "Nymphe", both Royal Navy frigates, destroyed in 1810, much too early to be relative. The 4 pounder would have probably been one of two guns on board, one being positioned defensively on each quarter of the stern, set to

## The Falkirk Cannon

fire on vessels giving chase. It would have been manned in action by four seamen - a captain, two gunners and a powder-man.

#### References

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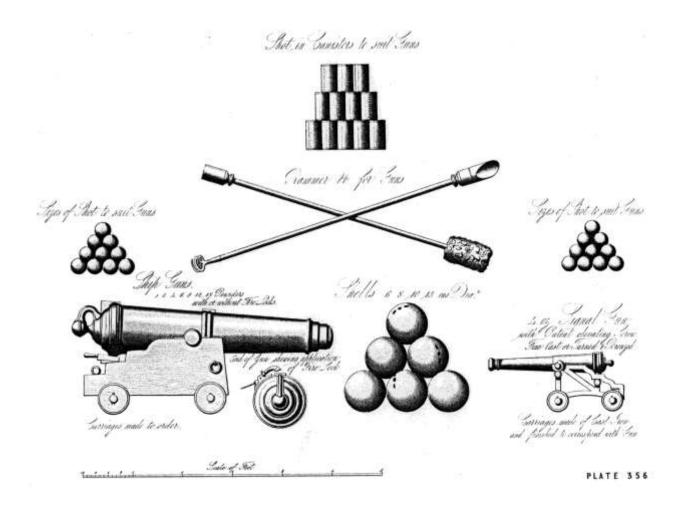
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We would like to thank Colin Hendry and the editor of "Guns Review" for permission to reproduce this article which first appeared in that magazine in May 1983.

## **FALKIRK IRON CO CANNON**

#### **Geoff B Bailey**

Calibre	Markings	Present Location
4-pdr		Fort Nelson, Hampshire, England [XIX.319]
4-pdr		Maritime Museum, Liverpool, Merseyside, England
4-pdr	FALKIRK PROVD. 4PR	Old Hastings Mill Store Museum, Vancouver, Canada
4-pdr	FALKIRK PROVD. 4PR	Old Hastings Mill Store Museum, Vancouver, Canada
4-pdr	FALKIRK 4Pr	National Museum of Scotland, Edinburgh, Midlothian, Scotland (recovered from sea off Isle off May)
2-pdr	FALKIRK/ PROVD/ 2PR	Hutchison Island, moved to Fort Pulaski 1943, sold 2014
2-pdr	FALKIRK 2P <sup>R</sup>	Private, Lancaster, England
6-pdr	FALKIRK/ PROV <sup>D</sup> / 6P <sup>r</sup>	Lincolnville Beach, Maine, USA



Illus: Plate 356 from the catalogue of products of Falkirk Iron Company shows the range of ordnance still available from the company in the 1860s.



Illus: A Falkirk 2-pdr cannon in a private collection in Lancaster, England.