

Nock's Seven Barrel Volley Gun

By John Osborne MG,DTT,PhD,FSG July 2006 reviewed April 2013



Designed by James Wilson a British engineer in 1779 and manufactured by Henry Nock a Master Gunsmith in London. A few prototypes were trialed and in 1780 Nock won a contract to supply 500 for use by the Royal Navy. In 1788 a further 106 were supplied with an improved double throated cock and a standard frizzen spring.

Six individual 20 inch long .52" (pistol) caliber smooth bored iron barrels were clustered around a central barrel and welded together. The flintlock flash-pan and vent ignited the central barrel which in turn via connecting vents fired the outer six barrels more or less simultaneously.

These guns were intended to be fired from the masts - crow's nests down onto the decks of enemy ships ranging alongside or down on to enemy boarding parties. These heavy 37" long guns were found to be unsatisfactory and removed from service in 1804. Instances are recorded where the sails were set on fire and once discharged the laborious reloading process afforded no advantage over conventional muskets.

I had the pleasure of the Restoration and Conservation of this 200 year old gun in July of 1979. On initial inspection I found 4 of the outer barrels still loaded one without powder and one barrel was double loaded with powder and ball. The barrel cluster was sound but with furry rust inside bores. Light rusting on all external iron / steel parts. Surface oxides on the brass work. The flintlock and trigger mechanism was rusted / gummed up and frozen solid.

The whole piece was coated in years of congealed oils, dust and grime. There were a few woodworm (borer) holes in the walnut stock. It had been stored for many years encased within a paneled wall.

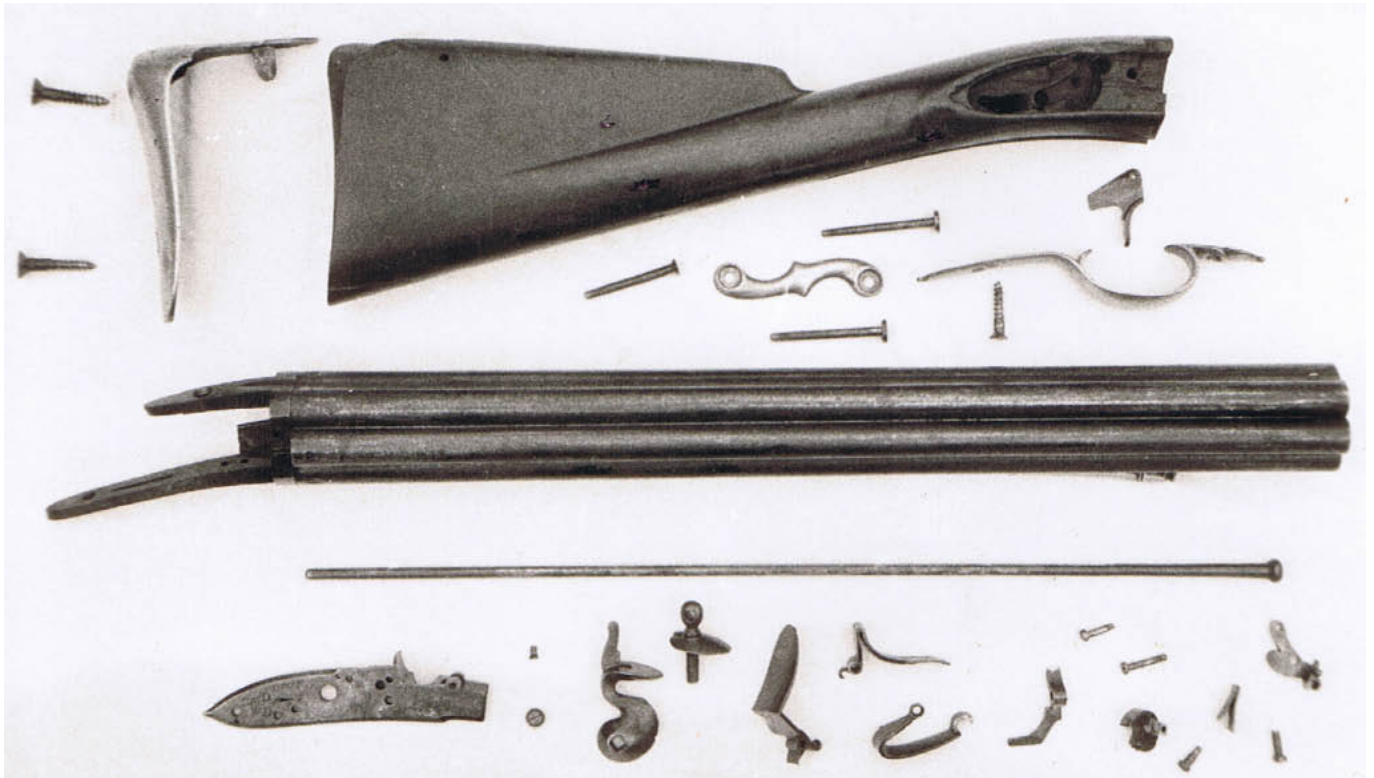
I valued this gun after C&R treatment at NZ\$2000 at that time (1979), based on the very few international / UK sales of that period. People should be aware that currently 2006 complete sets of exact reproduction investment cast metal parts are available for approximately US\$2000. Also complete new made reproductions of this gun are available which have been made to look old, and to the novice could be mistaken for an original, and being offered for a huge price.

Treatments

Ethical Considerations: the aim is to preserve and reveal the historical, aesthetic and functional value of this arm. The processes and methods used to be based upon respect for remaining original material. NZSG Standards. Recommend: this arm not be loaded and fired.

After very careful disassembly (most of the screws were rusted in) not a job for the amateur gunsmith or inexperienced person, I placed the barrel cluster in cold rain water and slowly brought to the boil allowing the mechanical agitation of the boiling water (an age old practice) to cleanse the acid impregnated bores and to free off the rusted in, swollen cloth patched lead ball projectiles also rendering the explosive powder charges harmless whilst wet.

This treatment also removed all the light surface rusting. Once cool I was able to extract the balls with ease. I repeated the boiling water treatment for three more days, allowing the barrel cluster to normalize - cool down slowly in air overnight. No traces of impurities were found in the water after the third day. The other metal parts were similarly treated. The rusted and frozen steel lock assembly was able to be easily disassembled after one days treatment in the boiling water.



All the originally carburized and heat treated steel parts where stress relieved by placing in a dry oven at 200-210 degrees C for 8 hours and allowed to cool down slowly in the oven thus allowing them to retain their surface hardness and temper, The brass work was polished.

The walnut wooden stock was lightly cleansed with warm mild soapy water to remove the grime but leaving the patina in tact and allowed to air dry. A few active borer - holes were detected and treated. Best museum quality inert microcrystalline wax was lavishly applied to seal off all surfaces, all metal to wood contact areas and the barrel bores were coated twice.

The gun was assembled; another coat of wax applied all over, and polished. This Gun is on display at the Queen Elizabeth II Army Memorial Museum, Waiouru, NZ, originally from the Hawkes Bay Museum. The guns provenance / NZ heritage unknown.

The gun in the top image is another gun and shows slight variations. These guns were all hand made, rarely with interchangeable parts.

An arms Conservation and Restoration Plan / Contract and Guidelines can be downloaded free of charge from www.gunsmithsociety.com

The New Zealand Qualifications Authority NZQA website www.nzqa.govt.nz carries the internationally recognized Arms Conservation and Restoration Unit Standards (which can be downloaded free of charge) listed under Mechanical Engineering / Gunsmithing, for those people who wish to gain formal qualifications in this profession.

Two NZQA registered National qualifications based on unit standards - known as Supplementary Credit Programs (SCPs) are available "Arms Conservation Advisor" ACA Level 4 and "Arms Conservation & Restoration Advisor" ACRA Level 5 (Master). Administered by Competenz the Industry training Organisation (ITO). For more information email info@gunsmithsociety.com