

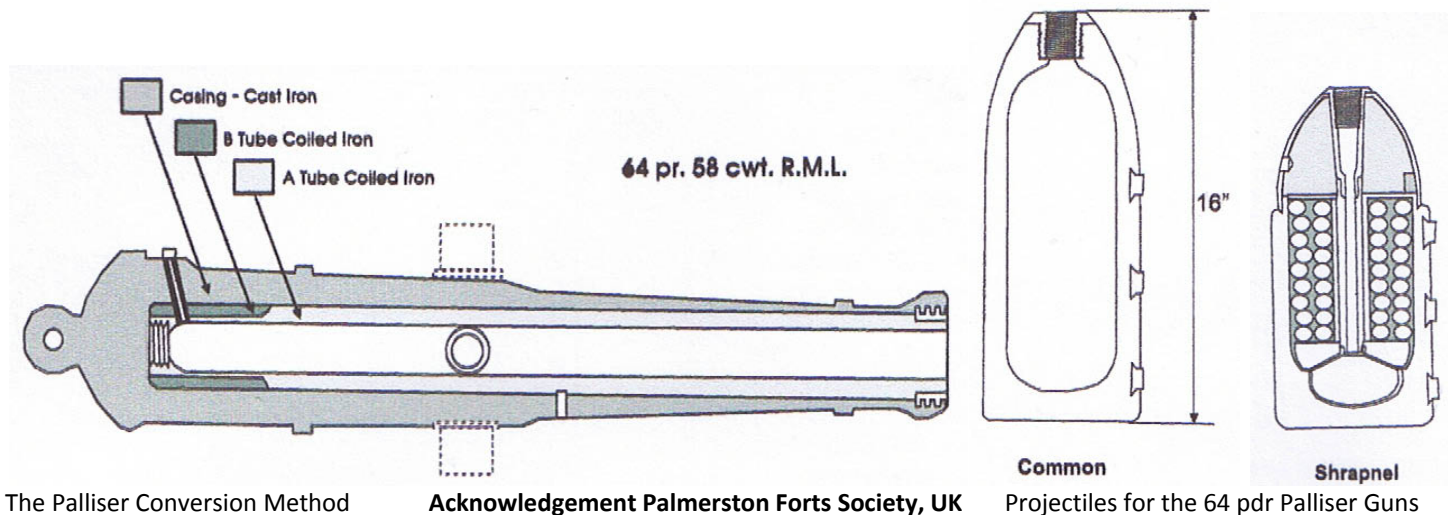
Pattern: Palliser RML 64pdr Guns 71cwt. Introduced: Into NZ 1885. Withdrawn: c1898

Millars Pattern 1834 8" smooth bored shell guns converted from c1863 to Palliser Rifled Muzzle Loading Guns 71cwt 64pdr operational in New Zealand from 1885 to 1898

General Millar was appointed inspector of Artillery in 1827. He was responsible for the simplified shape of these guns, which was the pattern for all subsequent cast guns (replacing the Blomefield pattern). The 8-inch Millar Pattern Shell Gun of 65 cwt was designed in 1834, to fire shell rather than solid shot, the 8" shell guns were later converted (from c1863) to the Palliser 64 pdr RML of 71 cwt. In 1863 Major Sir William Palliser developed a method for converting smooth-bore muzzle loading cannon to Rifled Muzzle Loading Guns (RML guns) by boring out the barrel then inserting a wrought iron liner retained by a screw flange at the muzzle then expanding the inserted tube by heavy charges and proofing, it was then bored to size and rifled with three grooves.



71cwt 64pdr Palliser Rifled Muzzle Loading Guns mounted on wooden Sea Service Carriages at Mt Victoria, Wellington, c1893.



The Palliser Conversion Method

Acknowledgement Palmerston Forts Society, UK

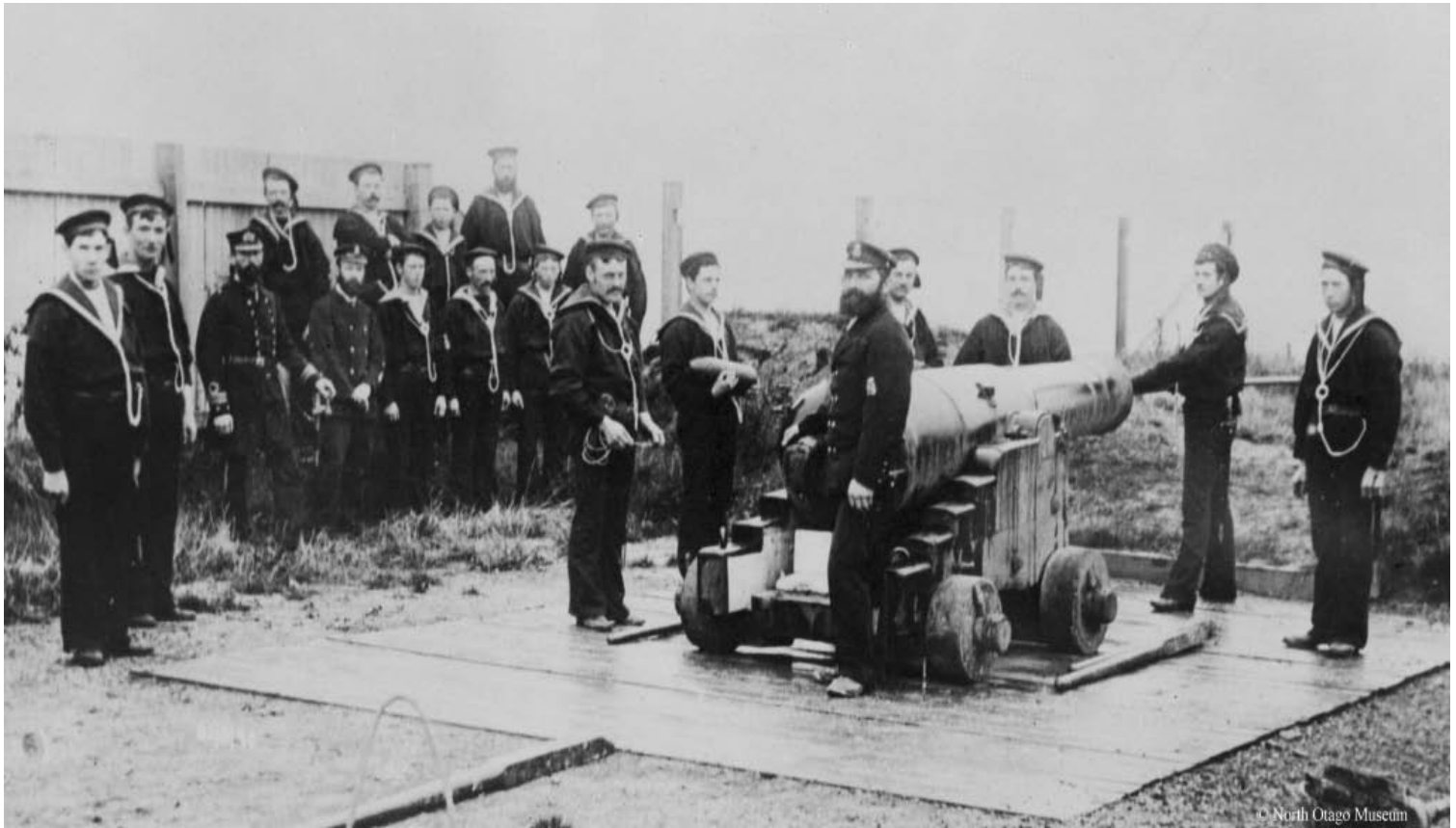
Common

Projectiles for the 64 pdr Palliser Guns

The Common cast iron bomb shell for the 64 pdr is about 3 calibers long the head is ogival, the point being truncated, screwed and fitted with a gun-metal (bronze) bush which contains the fuse. Three extractor holes machined in the head to aid projectile extraction when required. The three rings of copper studs were pressed into undercut holes machined into the body of the shell. The 64 pdr Shrapnel cast iron shell filled with 234 lead musket balls 14 to the pound, a nose fuse and gas pipe to explosive charge in base. Three extractor holes bored in the head, wrought iron diaphragm separating black powder and balls, all lined with tin to exclude damp.

Palliser also developed an armour piercing shell for use against Ironclad warships. This shell made of iron, the head being chilled during casting to harden it and it could penetrate up to a meter of wrought iron and teak laminate armour.

A 1893 report on the state of New Zealand's defence classified half of the 71cwt 64 pdr (Palliser) gun carriages unserviceable, they had been permitted to rot where they stood. In situations where guns were exposed to the weather and could not be sheltered some were to be replaced with cast iron garrison carriages. The 1896 New Zealand Official Year Book reported that the 64-pounder rifled muzzle-loading converted 71cwt. guns at the main centers were mounted on garrison standing carriages and traversing slides. By the end of 1898 all provincial naval corps in New Zealand had either been turned into infantry companies or disbanded, only naval corps in the four main centers remaining.



Oamaru Naval Artillery Volunteers with their 64 pdr, 71cwt, "Palliser" Rifled Muzzle Loading Gun on Sea Service wooden carriage c1890



Looking north-west from the top of Mount Victoria 196 metres, an ideal gun position for the defence of Wellington c1880s

Acknowledgements and special thanks to;

Palmerston Forts Society www.palmerstonforts.org.uk
National Army Museum, www.armymuseum.co.nz

Oamaru Naval Artillery Volunteers by John Osborne July 2006
North Otago Museum, www.northotagomuseum.co.nz