

Gunners' Tools 2

This panel from *Buki nihyaku-zu* (Illustrations of 200 Weapons) depicts:

1) long tools used to extract a musket ball from a barrel (after a misfire, for example) or clean the barrel of powder residue;

2) a ramrod for tamping down the shot and powder; and

3) a bandolier for carrying tubes of paper or bamboo called *hayagō*, each of which contained premeasured gunpowder and a musket ball for quick loading. This bandolier was designed to keep the gunner's sleeves out of the way during loading and firing.

The display case below contains other gear carried by infantry, including a pair of gunpowder chests labeled "Matsumoto Ammunition Brigade" (*matsumoto gyokuyakugata*). Each gunnery unit was supported by porters who carried shot and powder. The design of the chests allowed them to be worn slung on the back, much like backpacks, using ropes threaded through the iron rings on their sides.