

Lock, Stock, and Barrel: Making a Matchlock Musket

Producing a matchlock musket was a job for several different craftsmen: a blacksmith to forge the barrel, a woodworker to carve the stock, and a mechanist to craft and assemble the “lock” (firing mechanism).

Although firearms and gunsmithing did not reach Japan until the 1540s, Japanese craftsmen had already spent centuries developing relevant skills, such as smithing and metalworking. With two European muskets as the models, swordsmiths on Tanegashima Island were able to recreate the guns in less than a year, and by the 1550s, hundreds of muskets were being produced at foundries in many different regions.

JPN	ENG
【銃身・鉄砲師が作る】	Forming the Barrel (Blacksmith)
真金・筒を作る心棒となる	A hardened iron mandrel is used to shape the barrel
瓦金・筒状に荒巻したところ	The barrel core starts as a piece of roughly cylindrical wrought iron
真金を入れて鍛える	The iron is wrapped around the mandrel and forged
二重巻張・巻板を筒に二重に巻きつける	Strips of iron or steel are wrapped in two layers around the barrel core
銃身・先目当、前目当がつけられる	The barrel is tapered, and the front and rear sights are added
銃身銘・作者銘が刻まれるものもある	Some barrels are etched with the name of the gun's owner or manufacturer
【銃床・台師が作る】	Shaping the Stock (Woodworker)
白木に墨入れがされる	The dimensions of the stock are inked onto a block of wood
銃身をおさめる切り込みを仕上げる	The block is cut and shaped to fit the barrel
形を整え、銃床が完成する	The buttstock is carved
銃床銘・作者銘が墨書されるものもある	Some stocks are inked with the name of the gun's owner or manufacturer

【からくり・金具師が作る】	Assembling the Lock (Mechanist)
火ばさみ	Serpentine (holds the match cord)
侍請金	Serpentine tumbler
カニの目のついている盗人金	Sear with “crab eye” pin to hold the serpentine in tension
ゼンマイ	Spring
抑え金	Suppressor plate
地板	Lock plate
部品を組み立てからくりが完成する	The parts are assembled to form the finished lock

Forging a Matchlock Gun Barrel

The barrel of a Japanese matchlock musket starts as a sheet of wrought iron, which is wrapped around a tempered iron rod called a mandrel and forged into a seamless tube. An iron breechblock is screwed into the tube’s tail end to seal it, and the barrel’s interior is honed to a smooth, consistent inner diameter. From there, the barrel is worked into its final form. The muzzle is shaped, and sights are added at both ends. Finally, the barrel is joined to the stock, and a band of metal is used to secure it. The lock mechanism and lock plate are added, and all the elements are fixed in place using brass pins.

Mass-produced muskets used by rank-and-file soldiers had simple barrels made from single sheets of iron. In contrast, the barrels of muskets carried by samurai were wrapped in additional strips of metal to reinforce them. The most valuable matchlocks were those with barrels wrapped in two strips of tempered steel made from black sand, the same strong, flexible steel used to make Japanese swords.