

## Explosives

Gunpowder was the propellant used to fire cannons and muskets, but it could also be used to make bombs. This panel from *Buki nihyaku-zu* (Illustrations of 200 Weapons) shows several kinds of explosive munitions:

- 1) a hand grenade ignited by a fuse;
- 2) an explosive round for a large-bore matchlock musket;
- 3) a land mine;
- 4) an hourglass-shaped grenade;
- 5) an explosive cannonball (*bombu-dama*, from the English word “bomb”); and
- 6) a grapeshot cluster bomb (*budō-dama*) that was carried and thrown in a bag made from cloth and woven straw.

Early grenades (an example of which is displayed in the case on the right) were essentially glazed ceramic jars filled with gunpowder and shrapnel. Later iterations consisted of two copper halves filled with gunpowder and iron shavings, then wrapped in fabric and coated with a layer of lacquer. Toward the end of World War II, when metal became scarce, the military once again made ceramic grenades as a stopgap measure.