

Castle Defenses: *Ishi Otoshi*

These openings in the floor, called *ishi otoshi*, allowed defenders to repel enemies who reached the castle's stone-wall foundation below. To prevent people and objects from falling through the openings, the *ishi otoshi* were covered with wooden boards that could be removed when the castle came under attack.

Ishi otoshi were typically built at corners to address blind spots in a castle's defenses, but Matsumoto Castle has additional openings at the midpoints between corners. It was thought that a determined attacker could climb the castle's stone-wall foundation, which has a relatively gentle slope of about 57°. Putting *ishi otoshi* at the midpoints made it possible to prevent this and defend the castle against attackers who breached its outer defenses.

Although the name *ishi otoshi* (literally, "stone drops") implies that they were used to drop stones, the openings are quite narrow. If Matsumoto Castle had ever come under attack, defenders would more likely have fired down at attackers with bows and muskets.