

An Early Modern *Tatara* Manual

The eight-volume *Tetsuzan hisho* (Secret records of the Iron Mountain) was written in 1784 by Shimohara Shigenaka (1738–1821), the owner of an iron smelting operation. The multivolume work was designed to be an exhaustive manual on the operation of an ironworks.

The manual's fourth volume (displayed here) includes explanations and sketches showing how to build a *tatara* furnace and a *takadono* workshop to house it. By the time *Tetsuzan hisho* was written, *tatara* furnaces had been moved indoors. As furnaces grew larger and the smelting process was lengthened to several days, workshops were built to protect the furnaces from wind and rain.

The manual covers not only technical elements of the smelting process but also behavioral rules for each category of worker. For example, one passage in Volume 6 states that ironworks owners should set an example by refraining from drinking alcohol or gambling. It also advises them to prevent wandering entertainers from entering the village and distracting the workers. For the same reason, it cautions *murage* (foremen) not to let women linger in the *takadono* workshop.