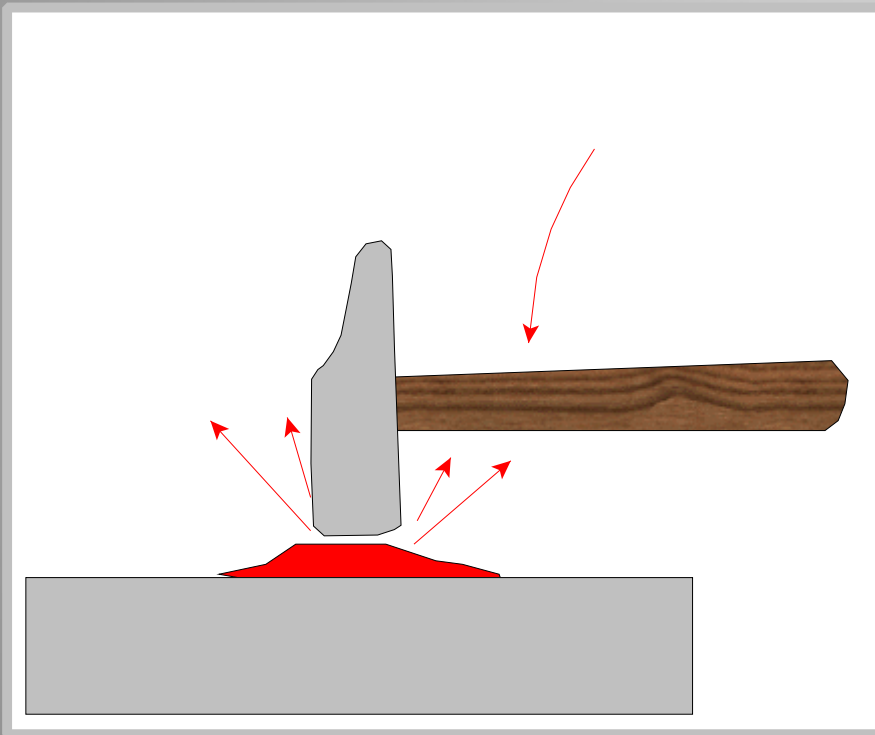


First Percussion Ignition

Forsyth Rifle, ca. 1807



Conception of Forsyth Percussion Ignition



Based on mercury fulminate, the priest Alexander Forsyth from Aberdeenshire, Scotland patented a lock with explosion ignition. In powder form mercury fulminate is placed in a container that can be pivoted, and stands almost vertically on the side of the lock. By turning the container, a precise measured amount of mercury fulminate is placed under a pin in the container. When firing, the hammer hits the firing pin and the measured powder beneath, explodes. The ignition of the main load in the barrel occurs through the touch hole.

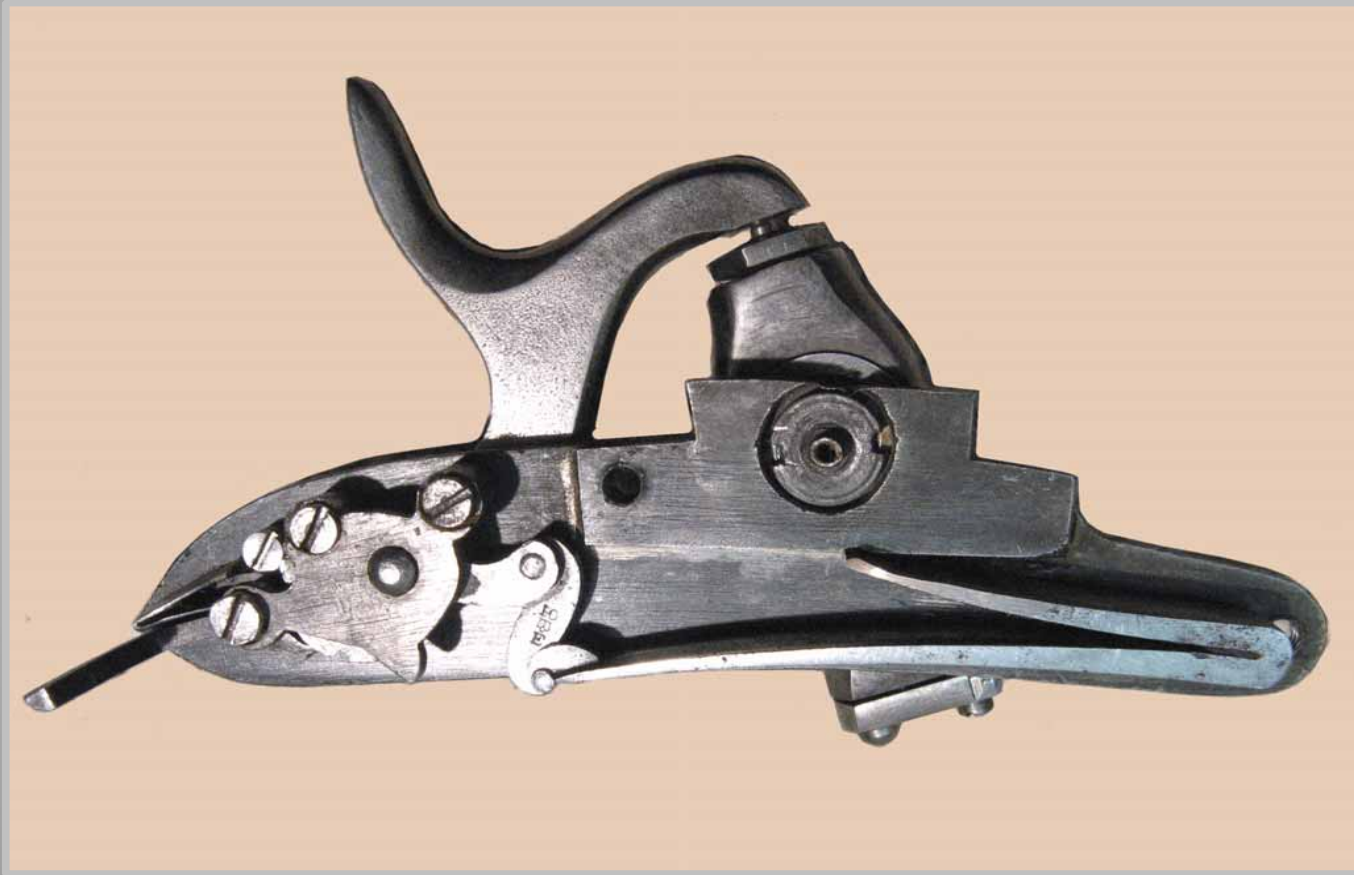
Forsyth Percussion Lock, ca. 1810

Percussion lock made to be interchangeable with flint lock



Forsyth Percussion Lock, Rear View

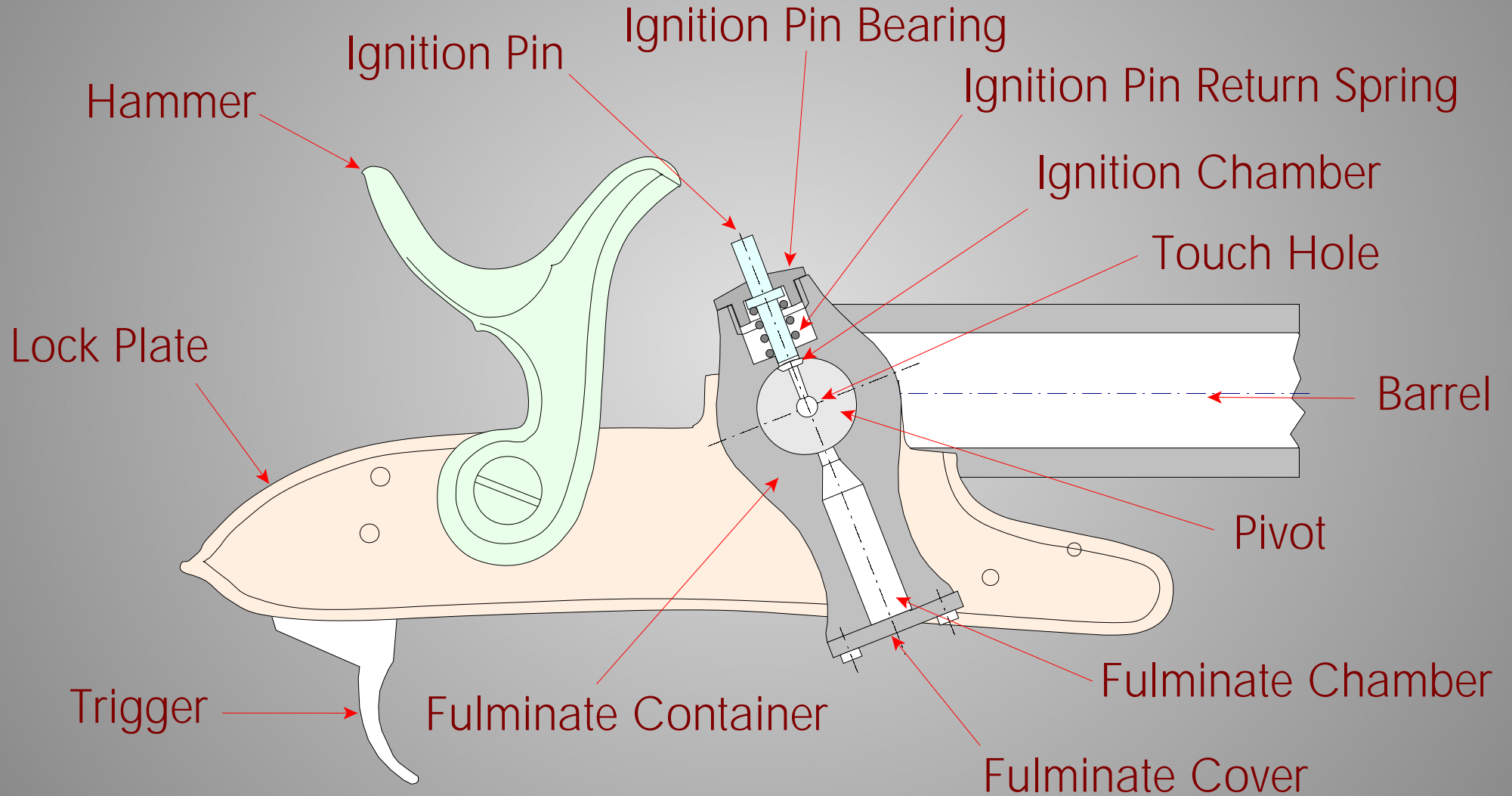
Percussion lock made to be interchangeable with flint lock



Percussion ignition transformed Flint Lock Rifle, ca. 1810

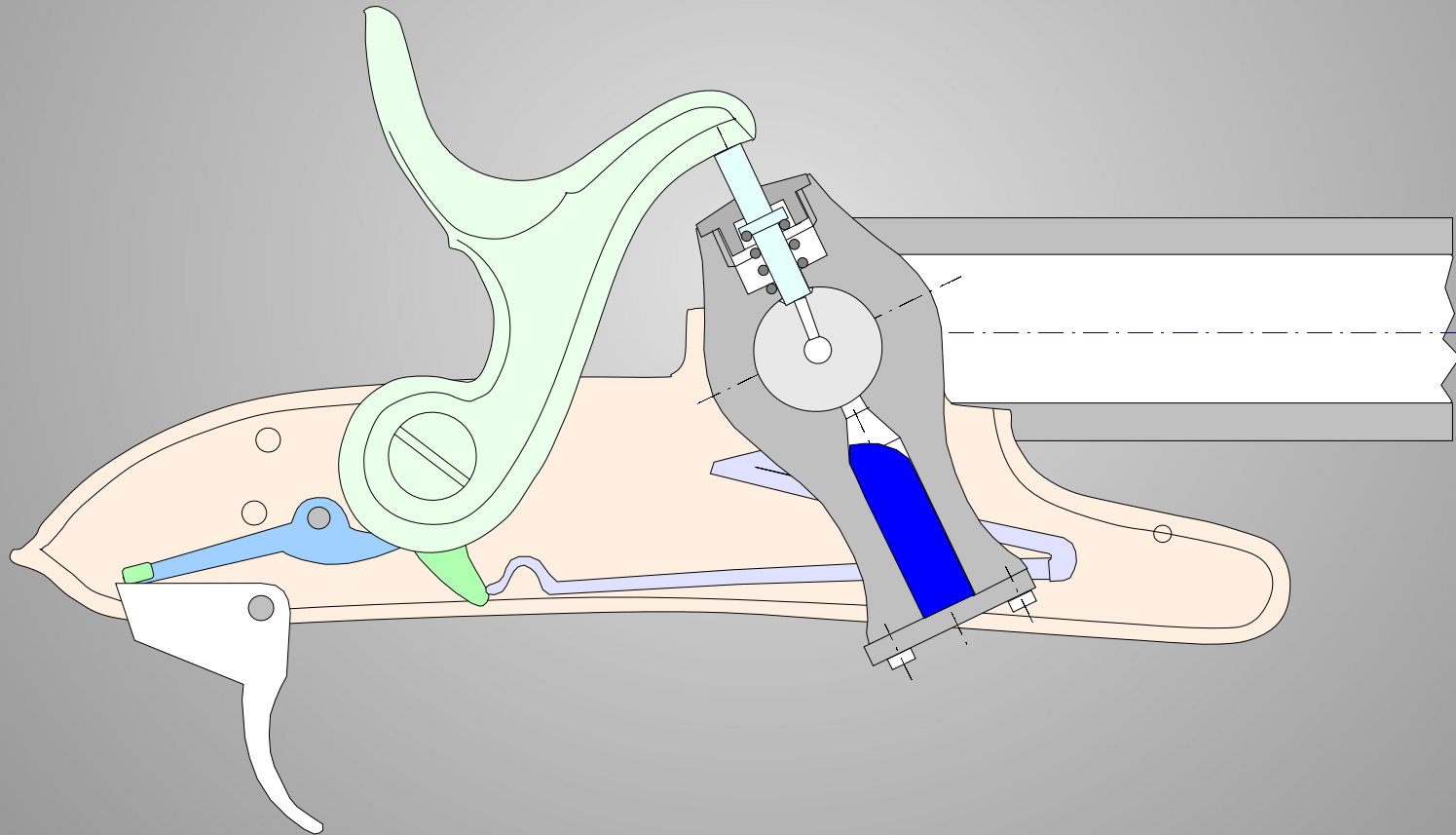


Cross Section of Forsyth Lock

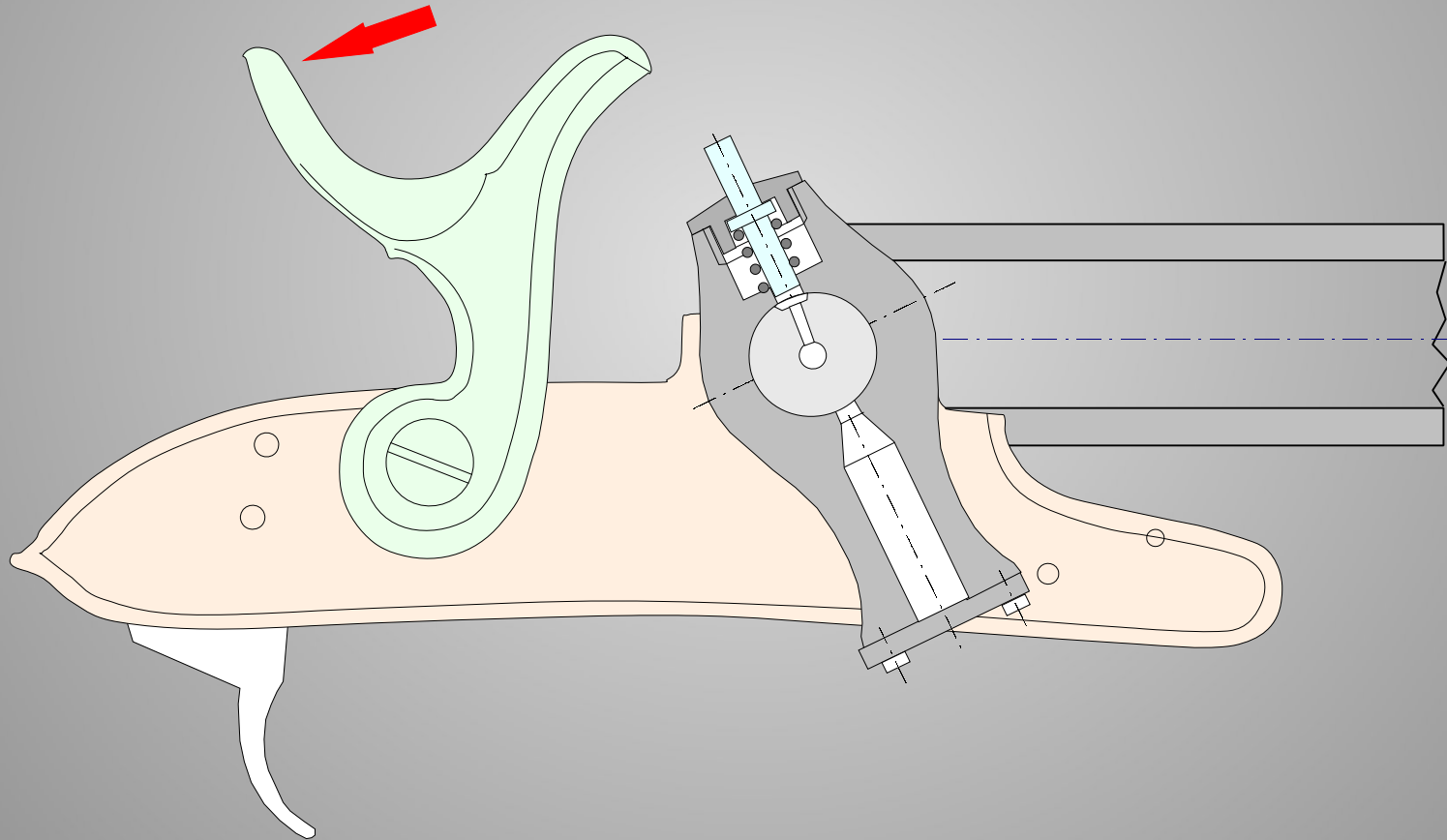


Filling up of Fulminate Container

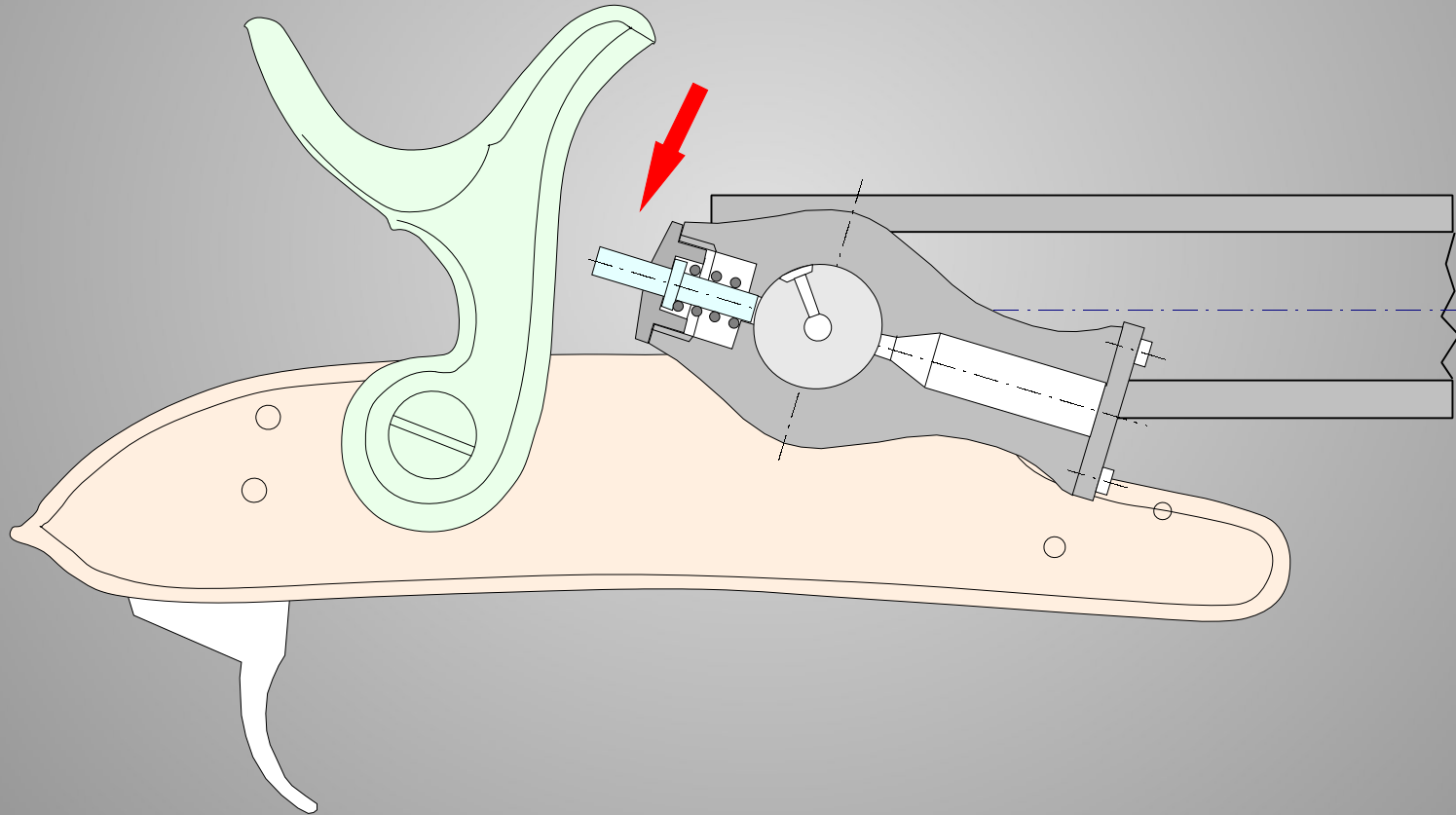
Forsyth lock in release condition



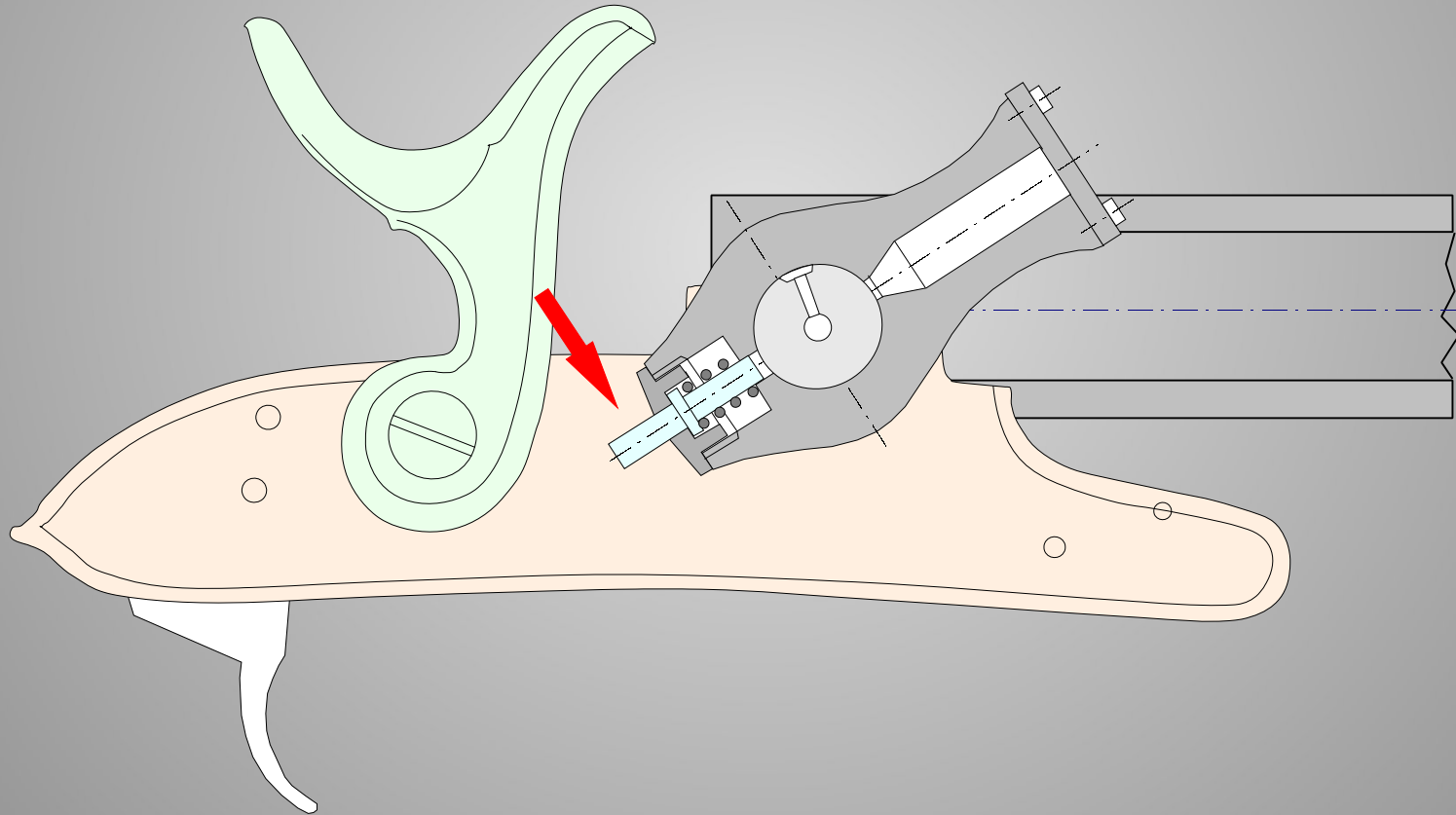
Cocking the hammer to the safety catch



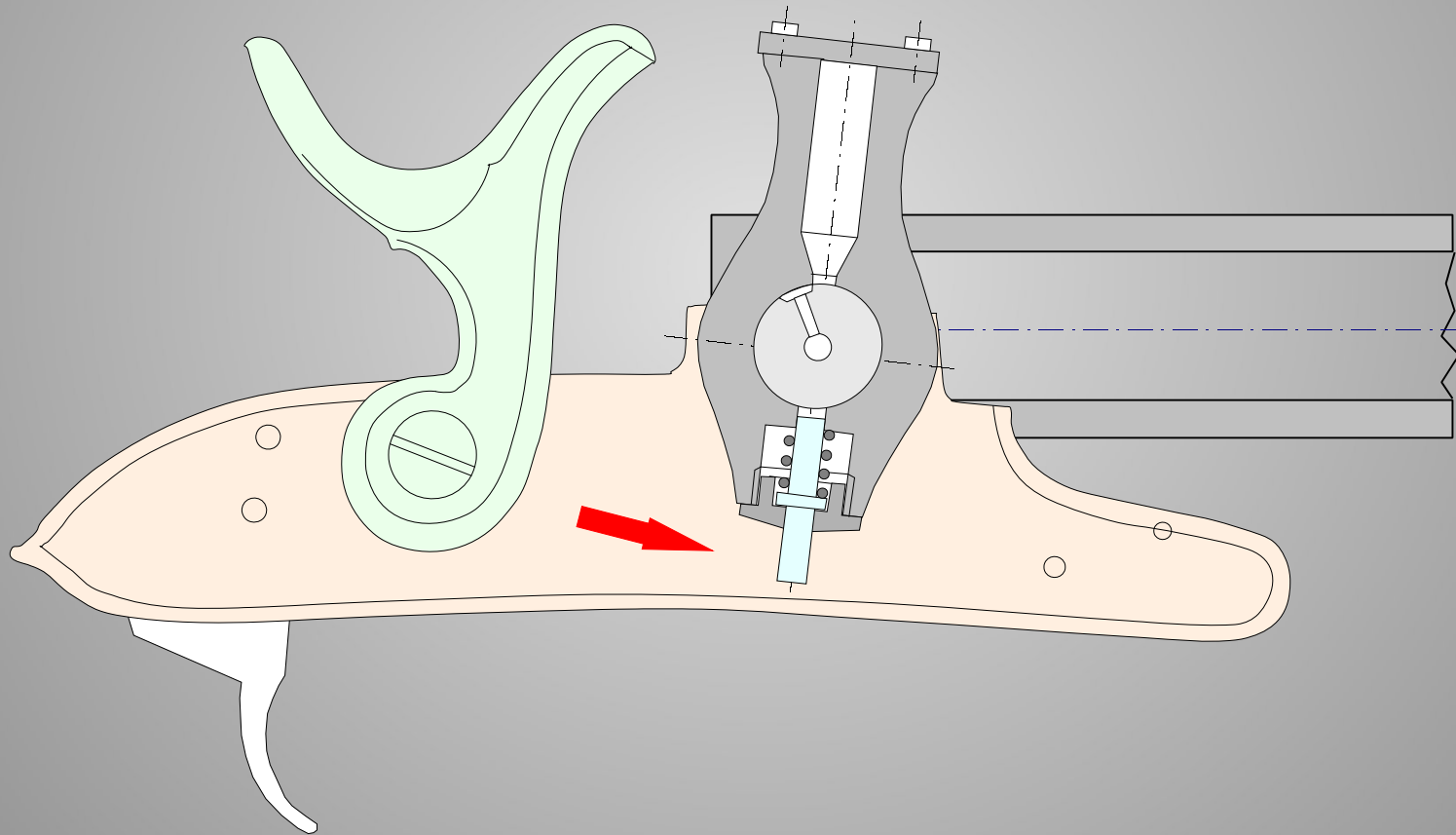
Turning the container into the fill-up position



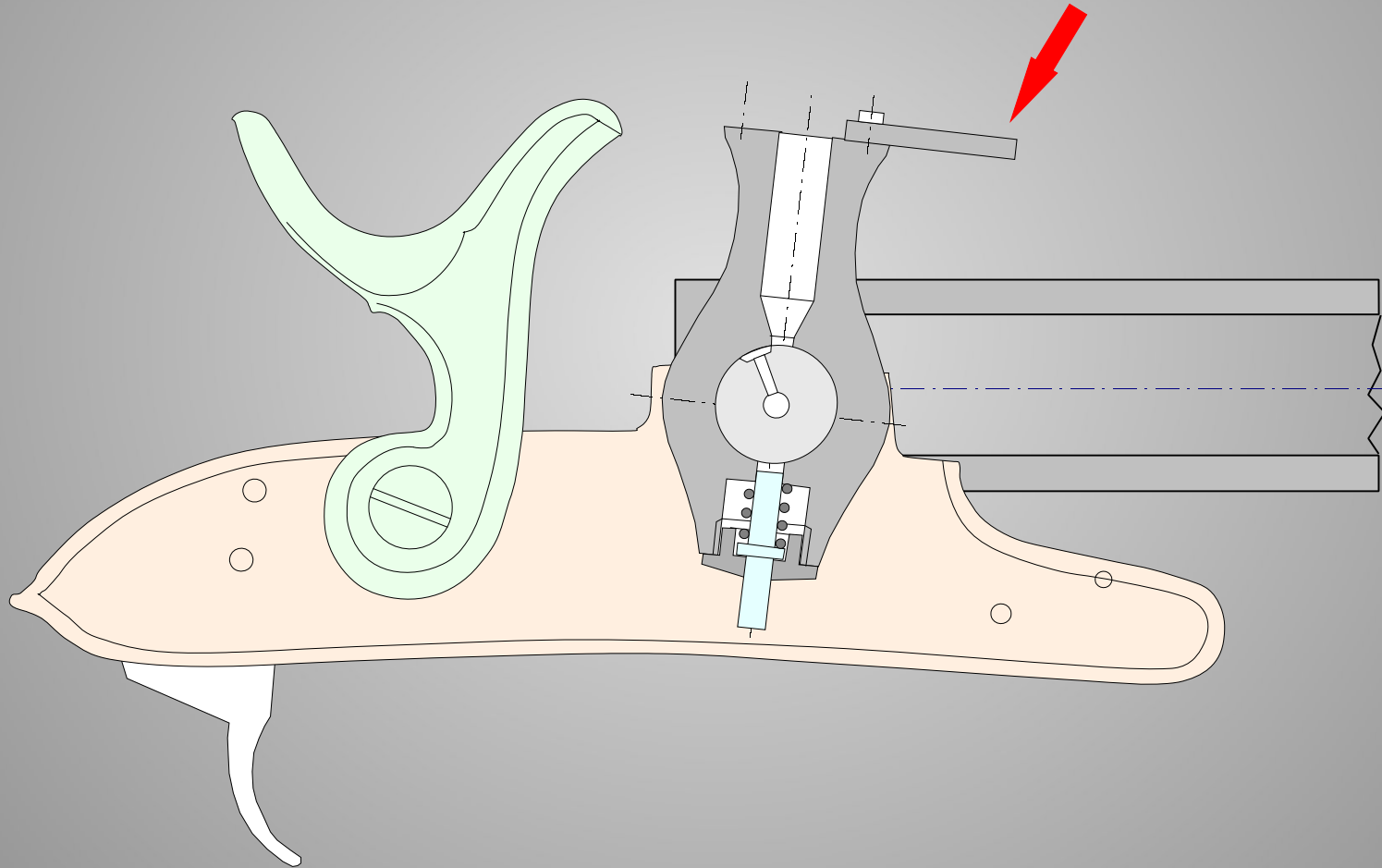
Turning the container into the fill-up position



Container in fill-up position

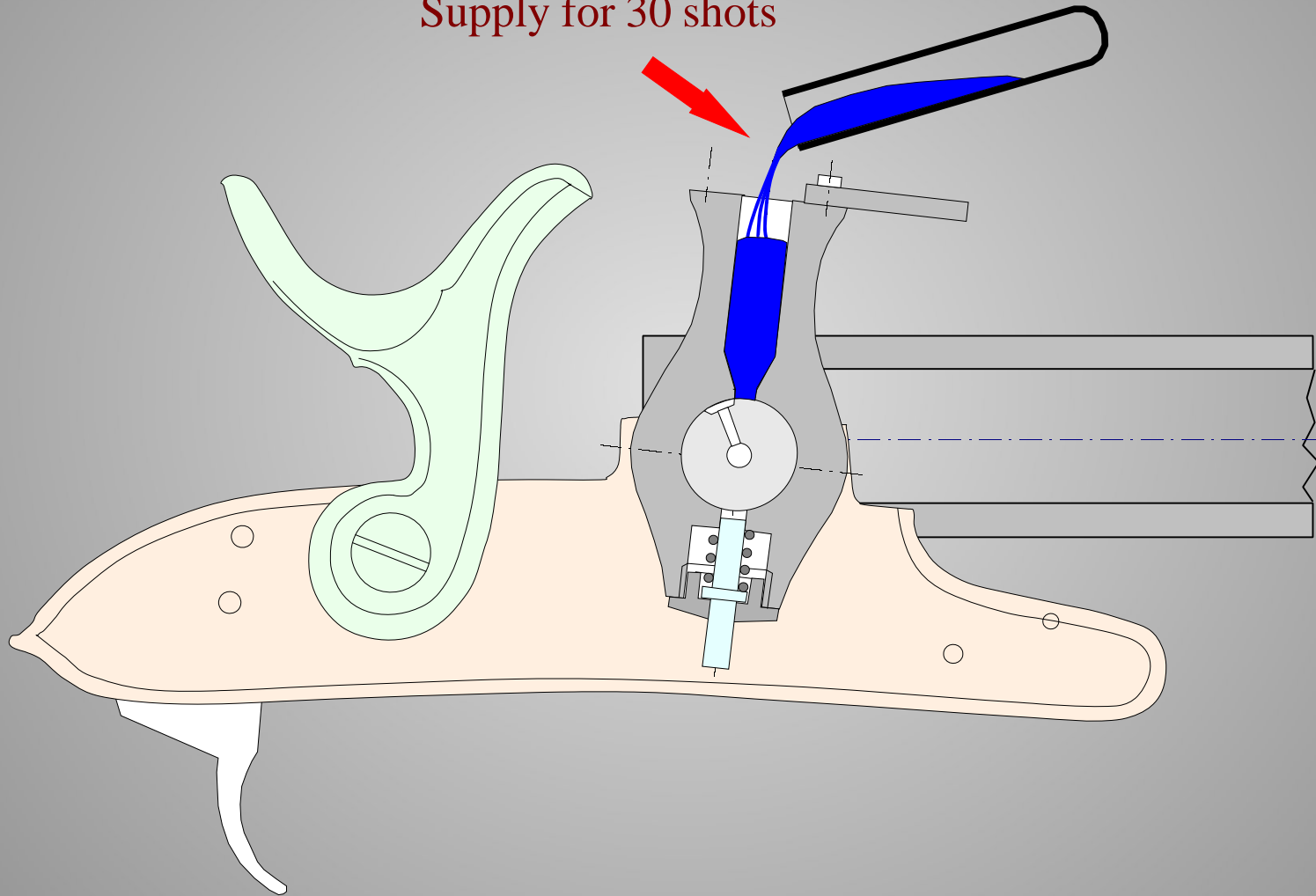


Open the reservoir cover

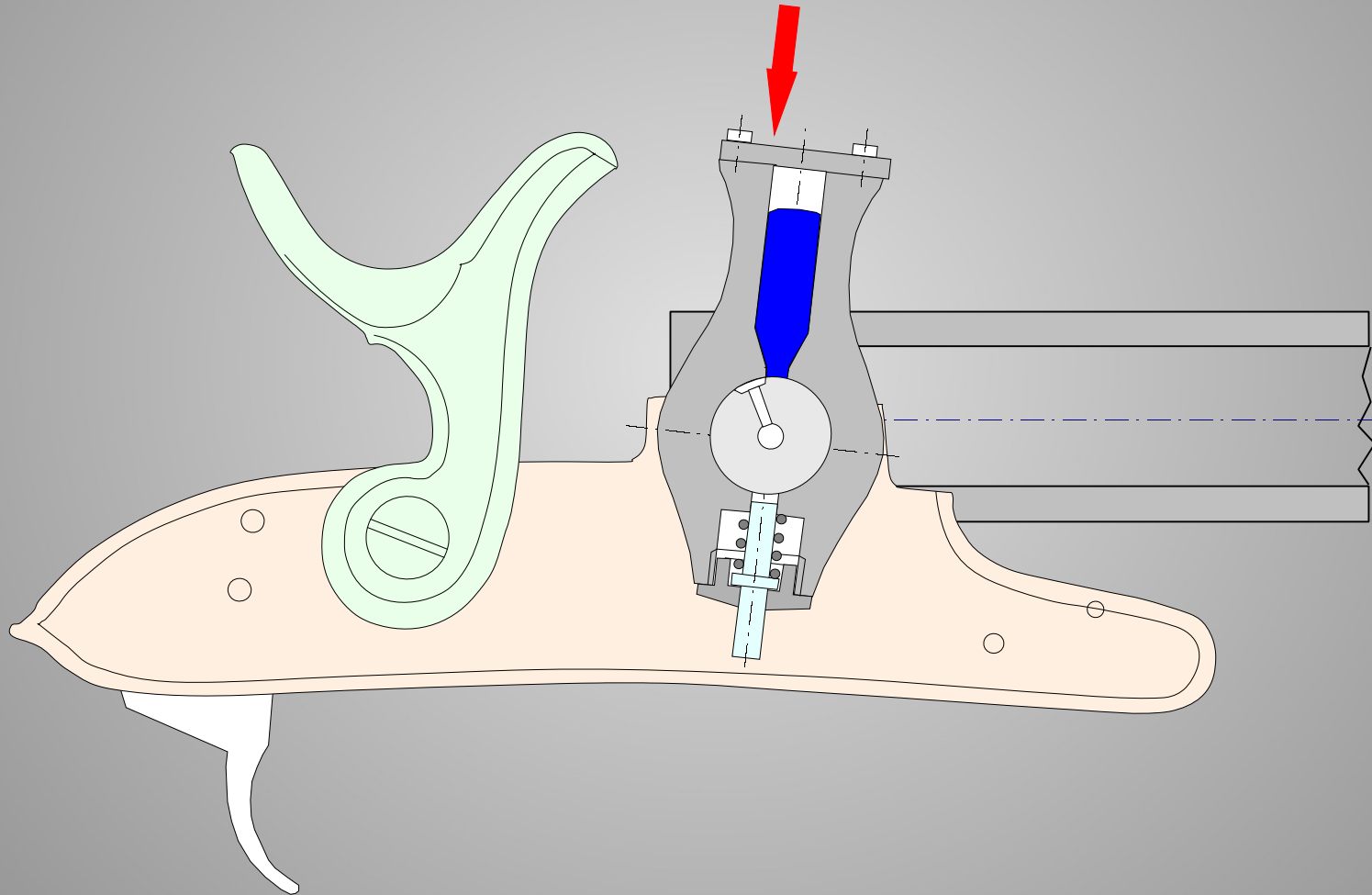


Pour-in of mercury fulminate into the reservoir

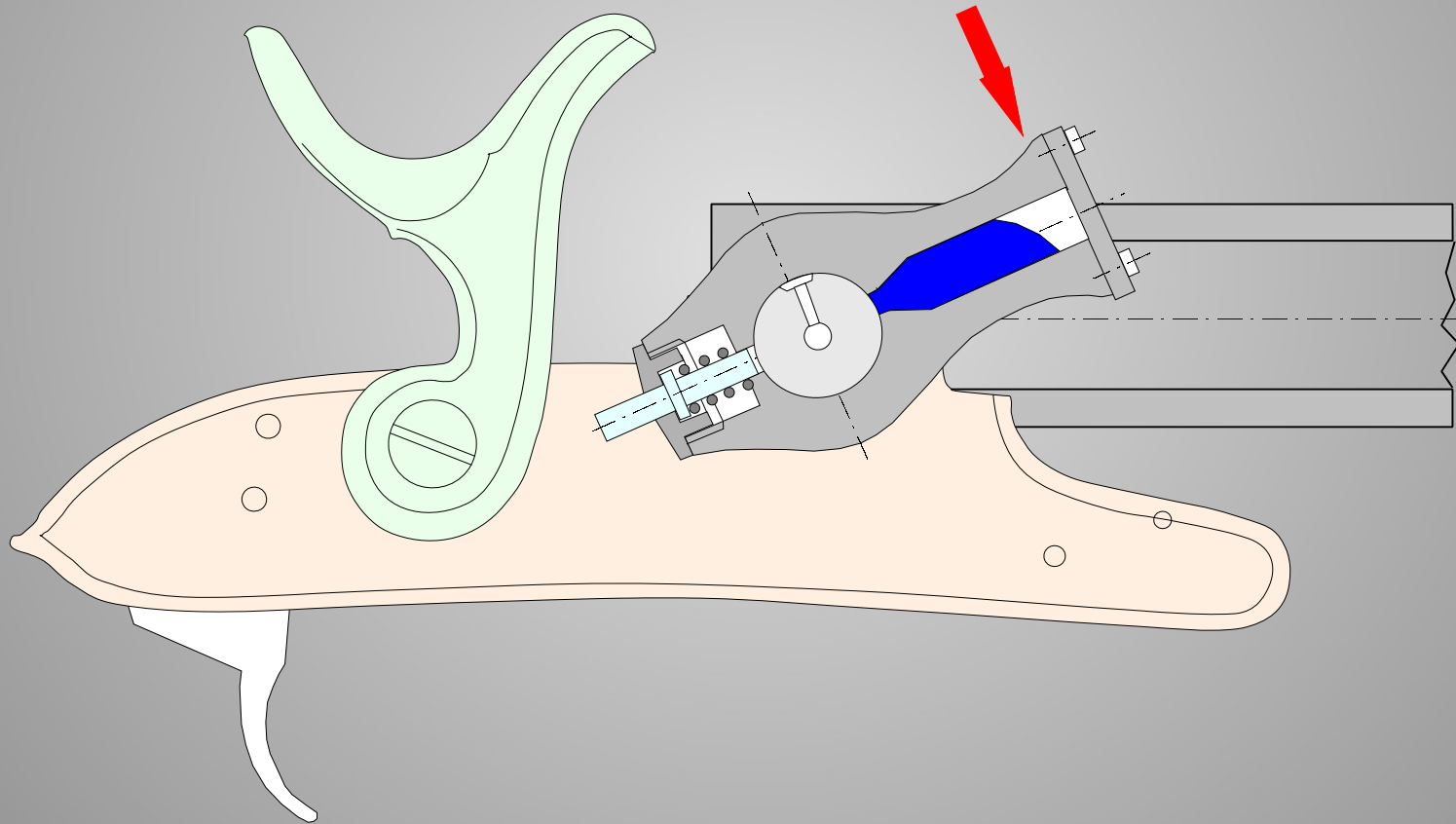
Supply for 30 shots



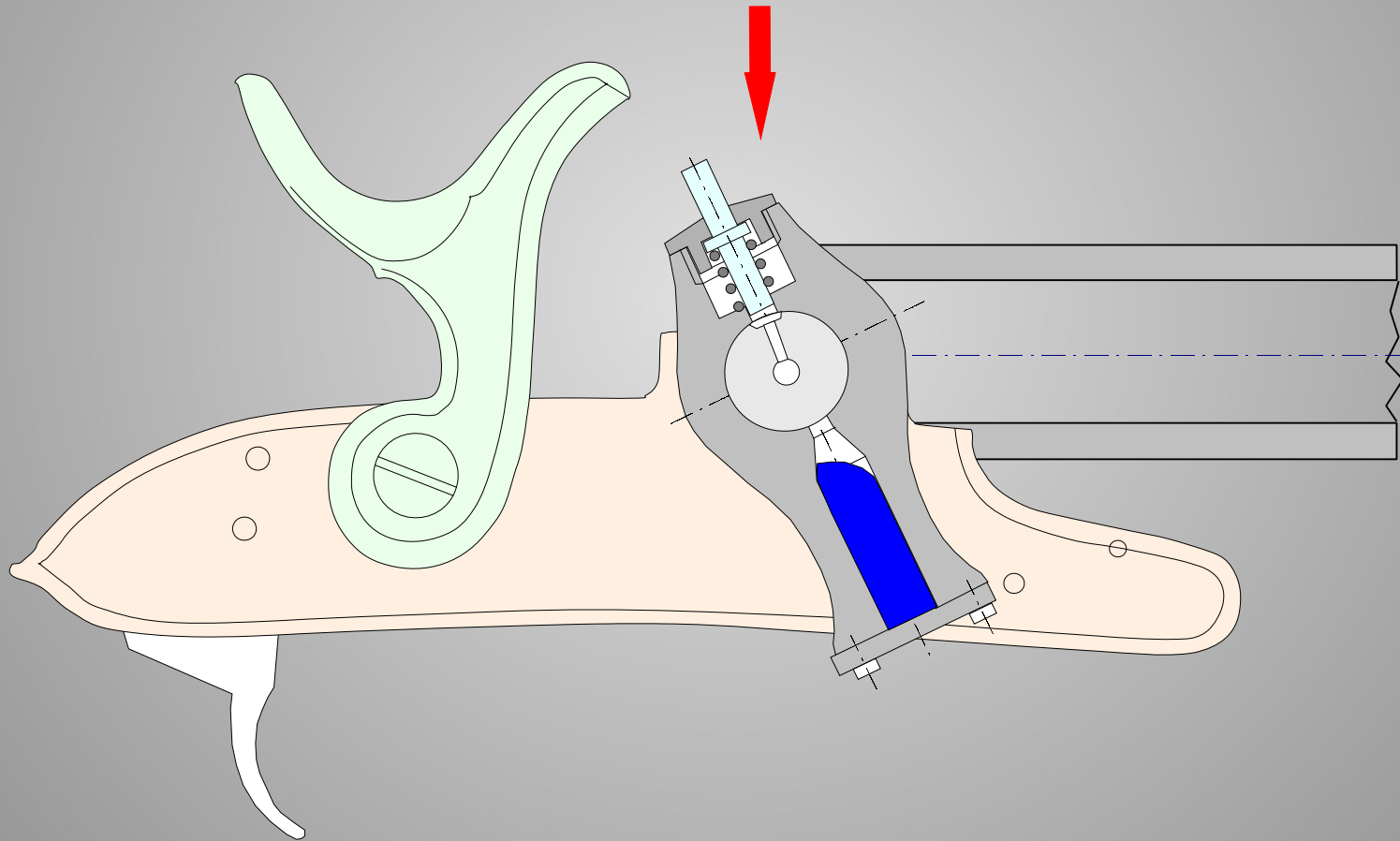
Close reservoir cover



Return container into release position

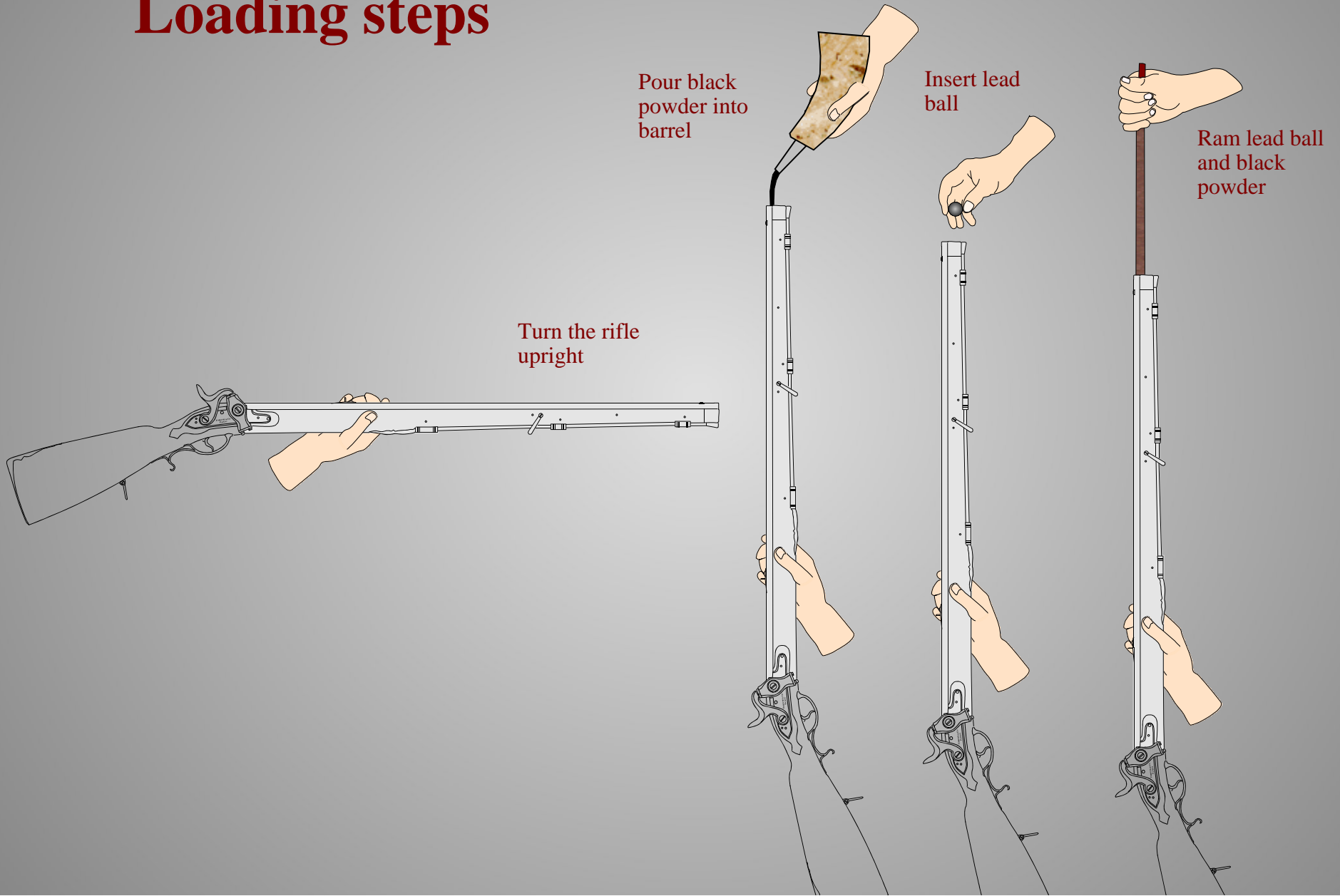


Lock ready for shooting

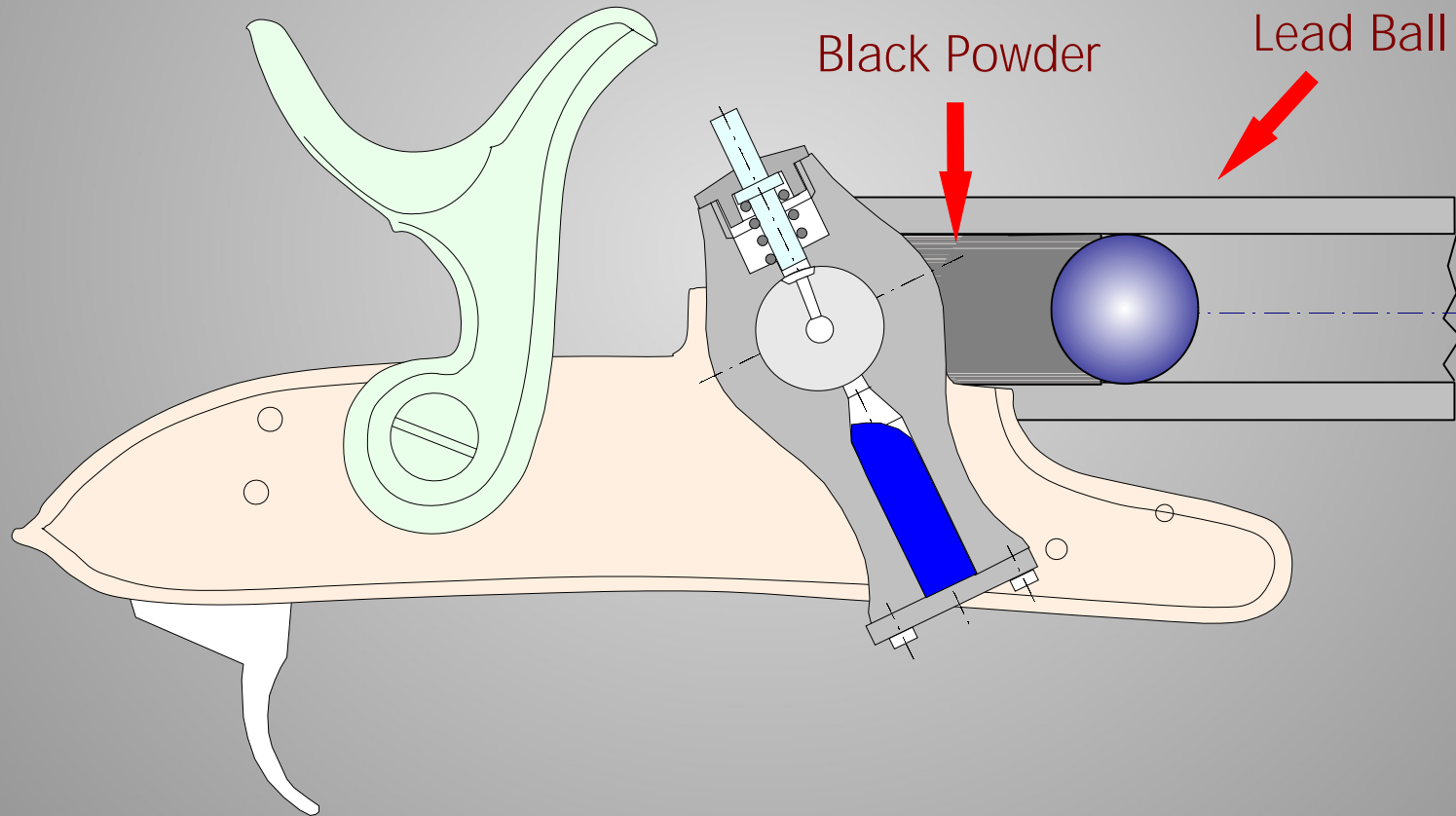


Loading of the Rifle Barrel

Loading steps

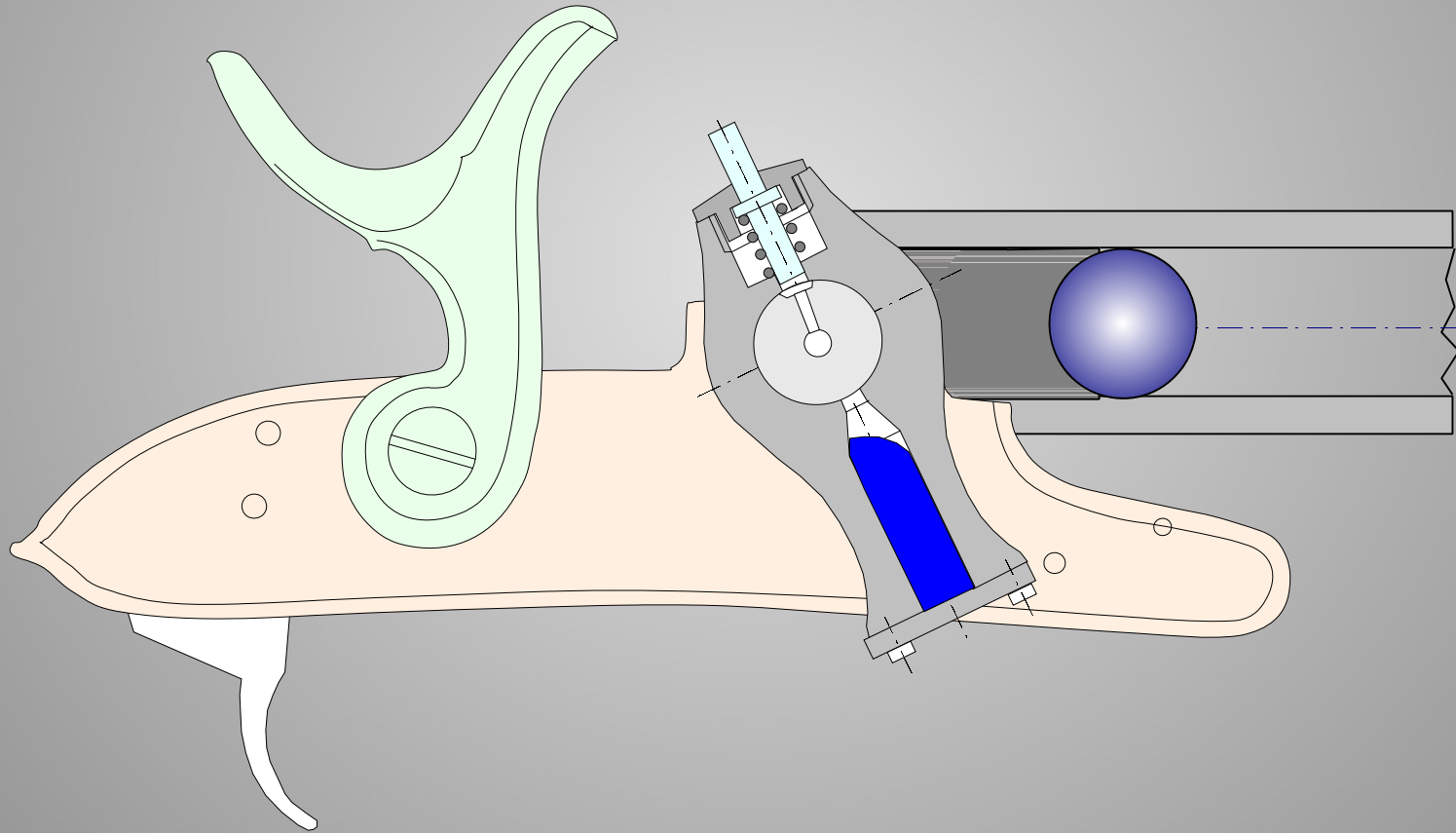


Rifle barrel loaded

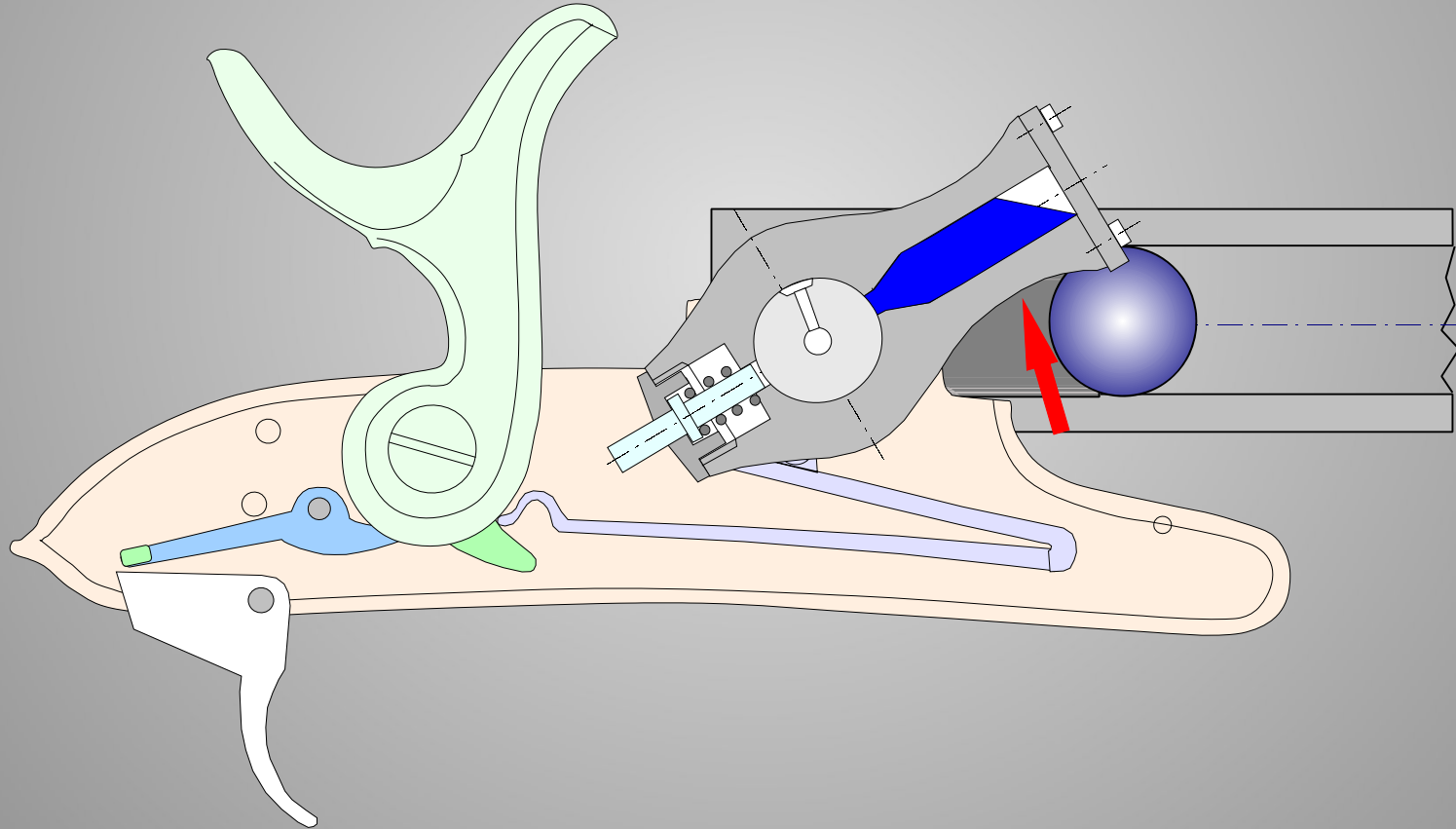


Firing Forsyth Rifle

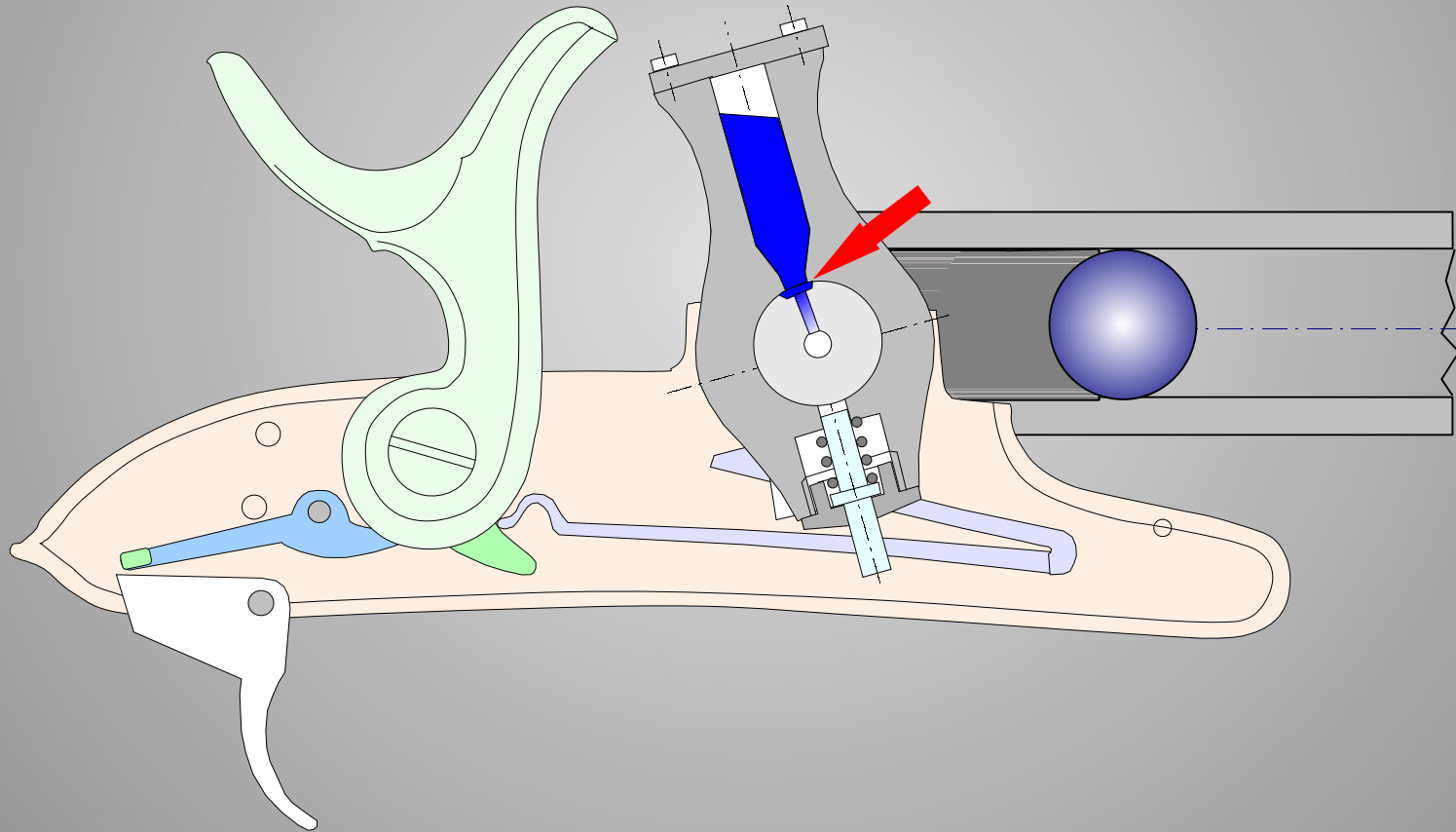
Rifle ready to be fired



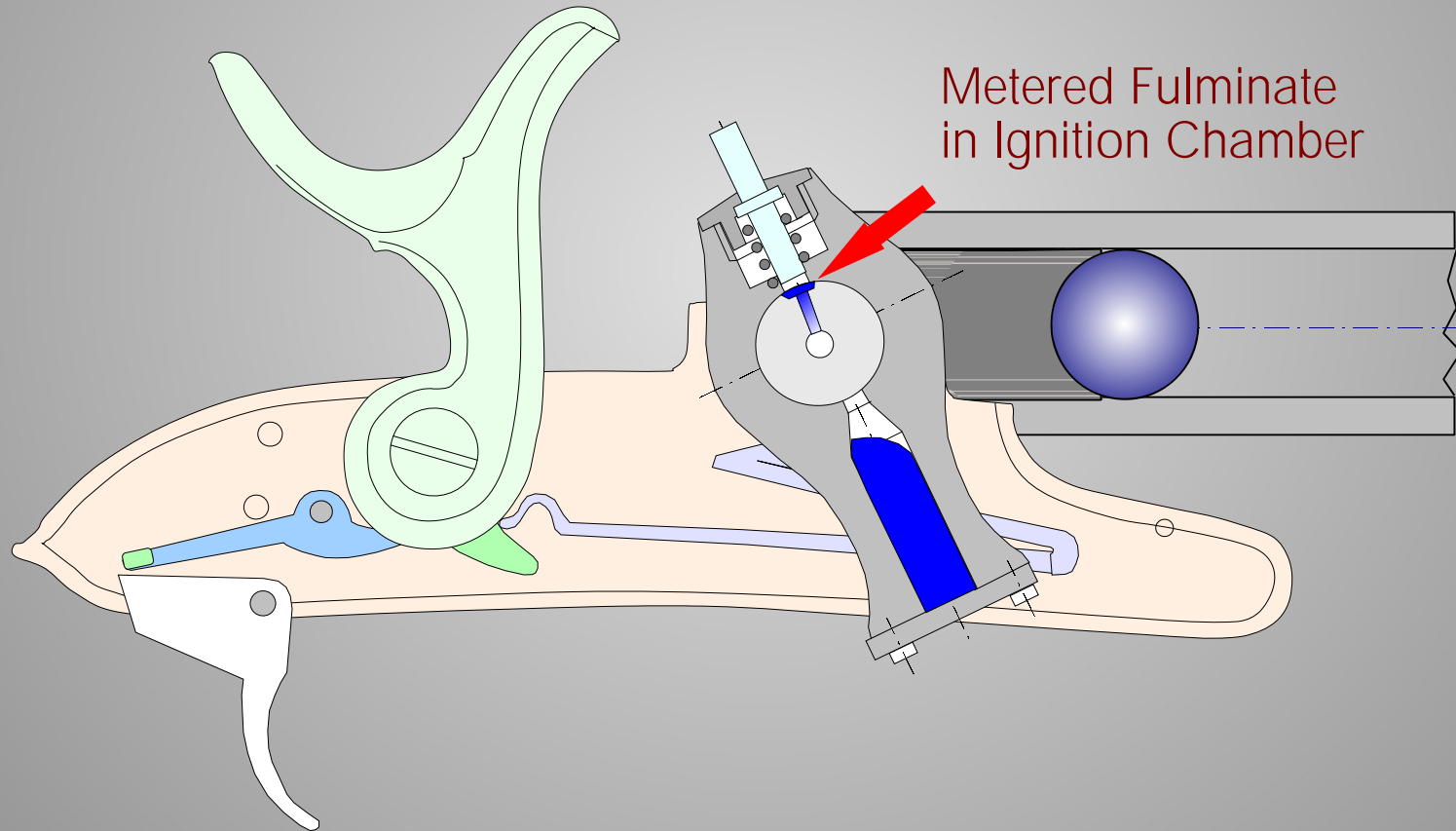
Metering of fulminate by turning the container



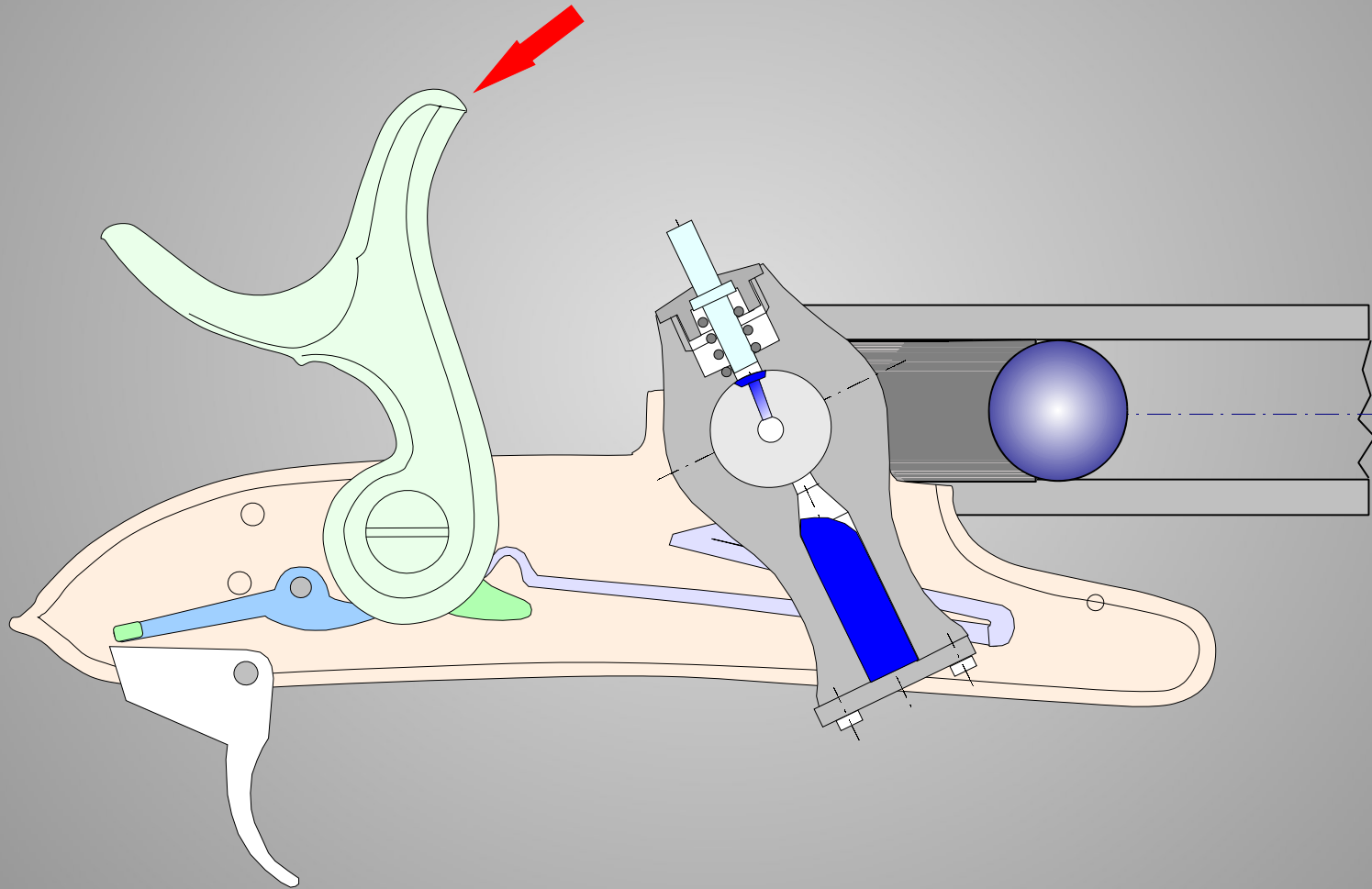
Fulminate gets metering chamber



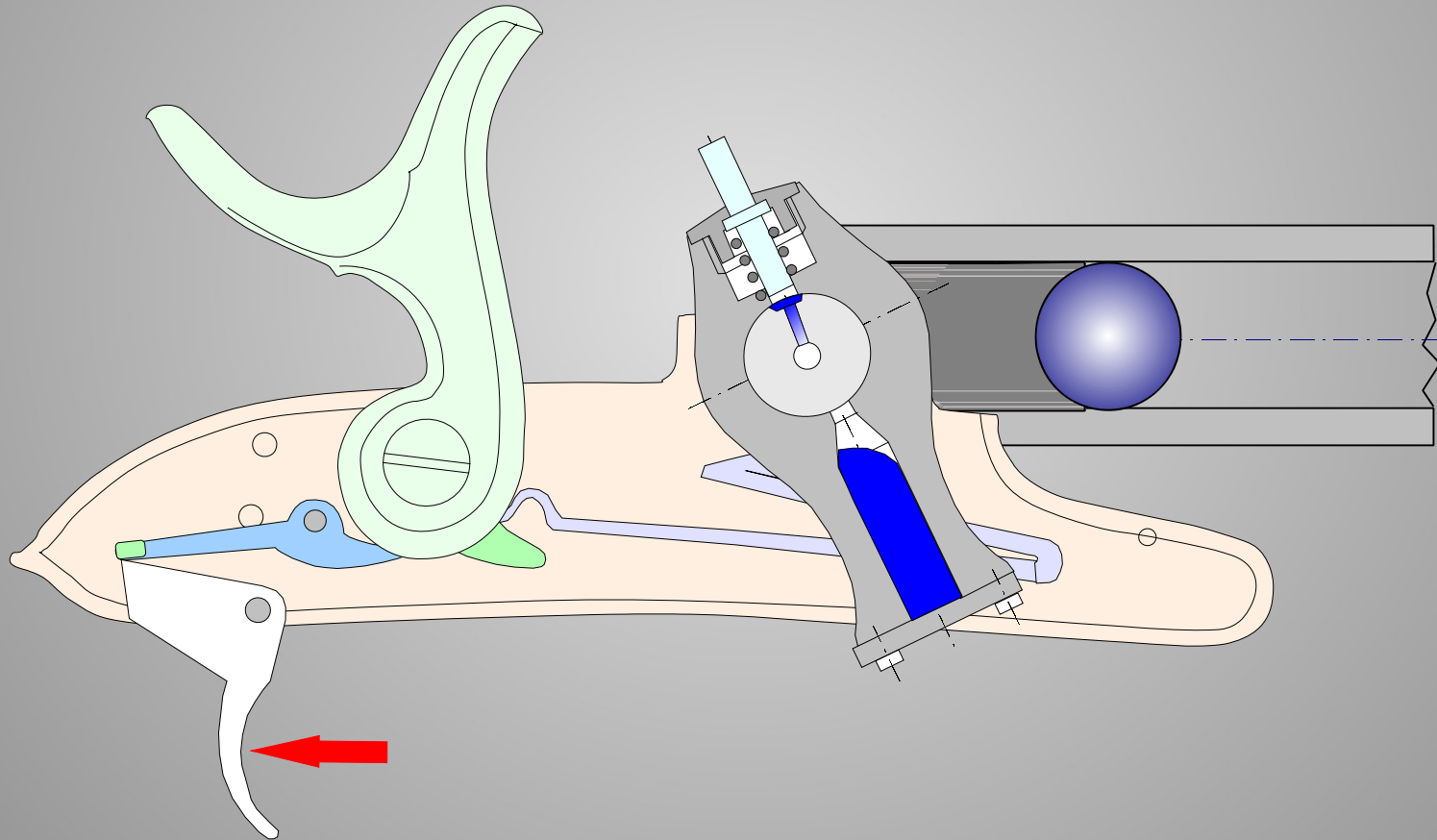
Turning the container back into the release position



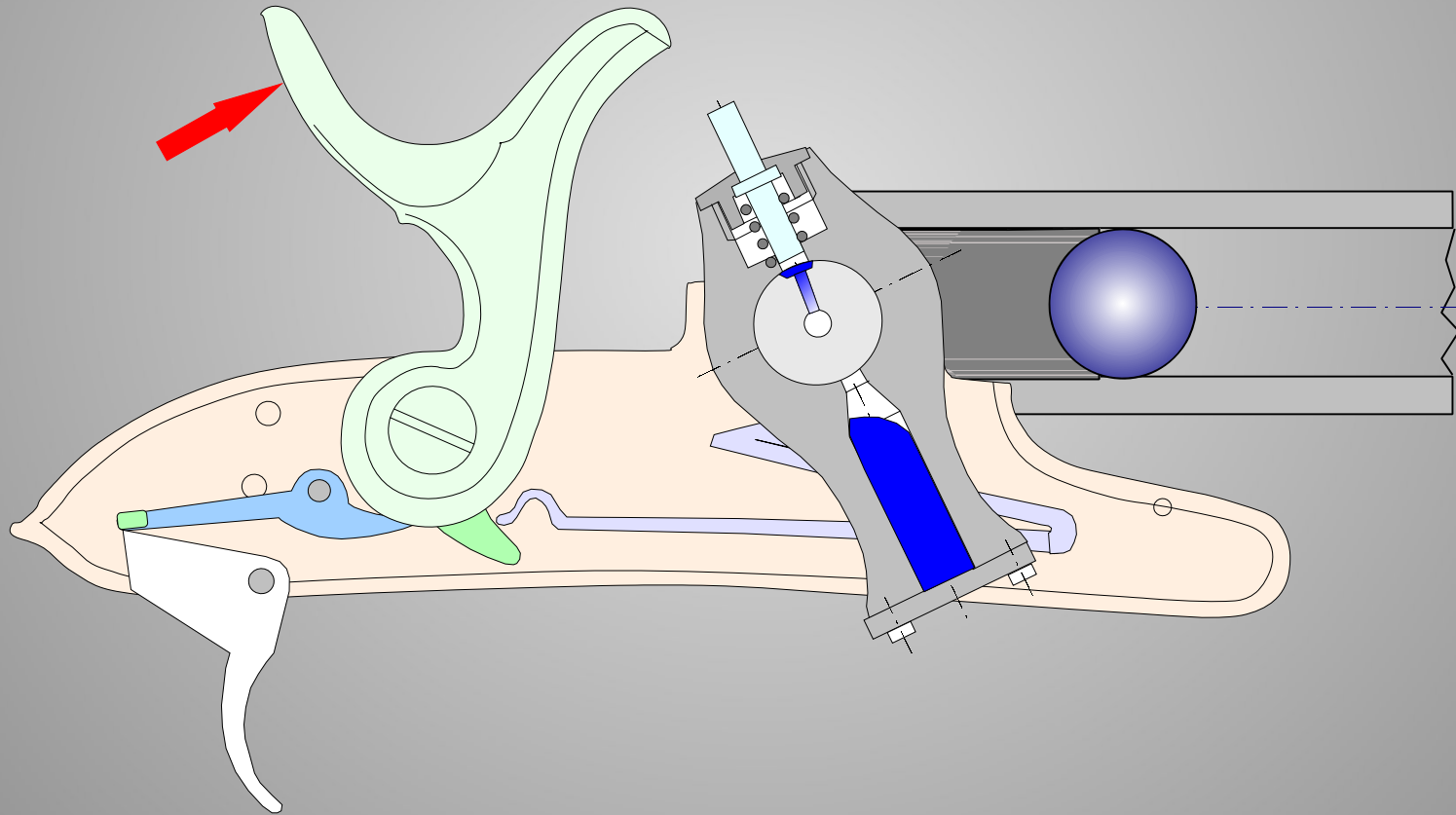
Hammer turned into fully-cocked position



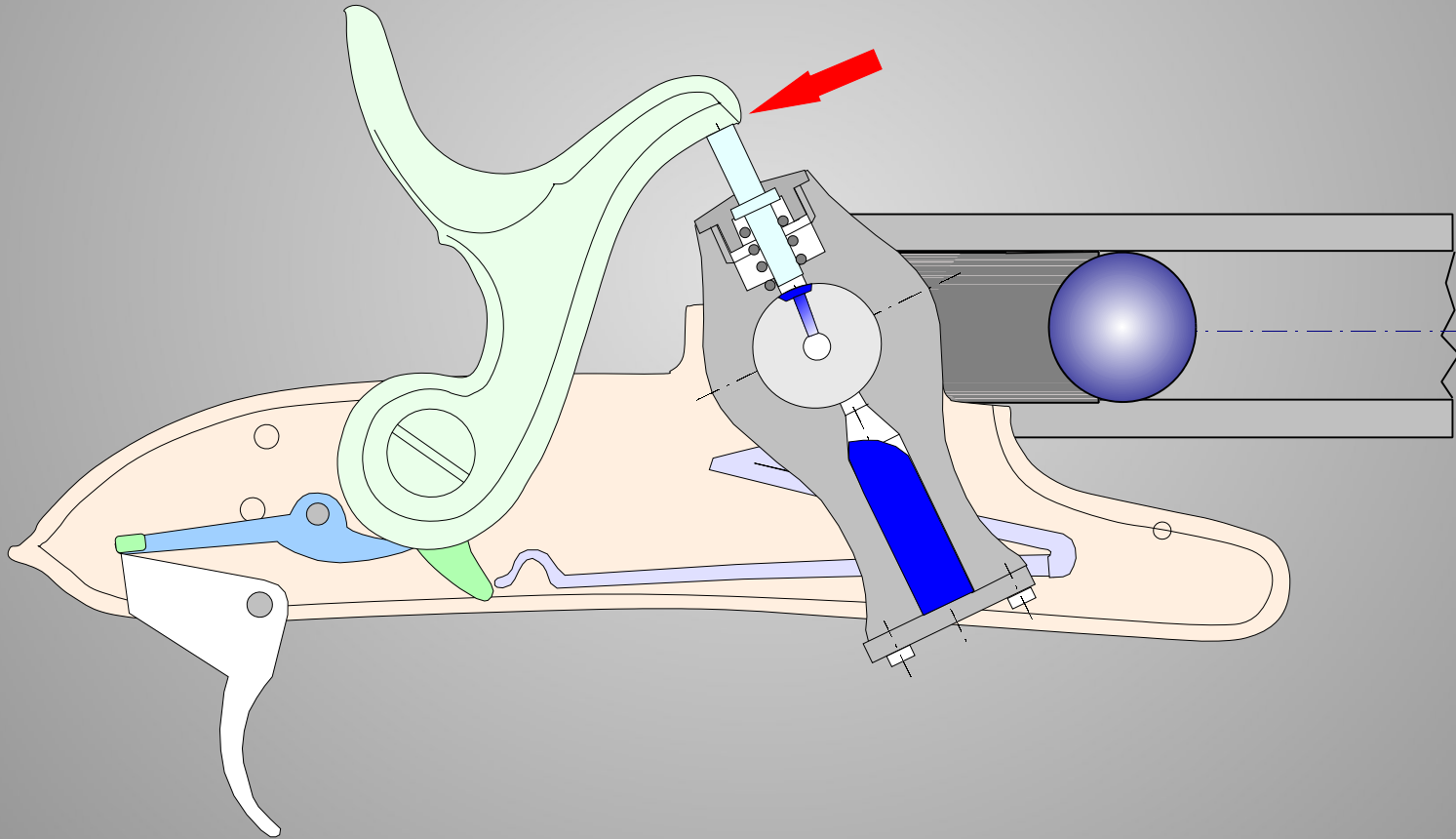
Release hammer by the operation of the trigger



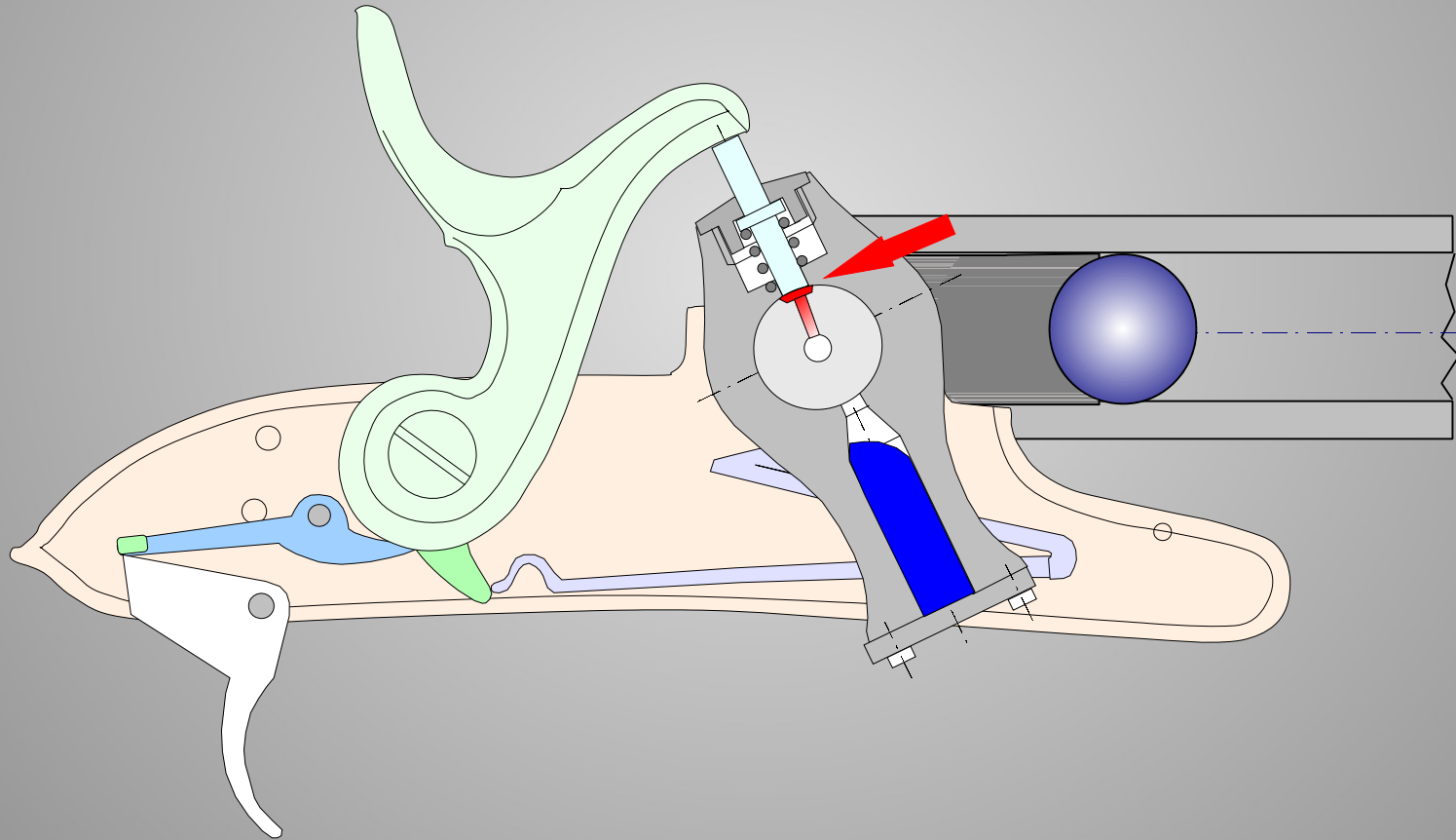
Hammer is pivoting towards the firing pin



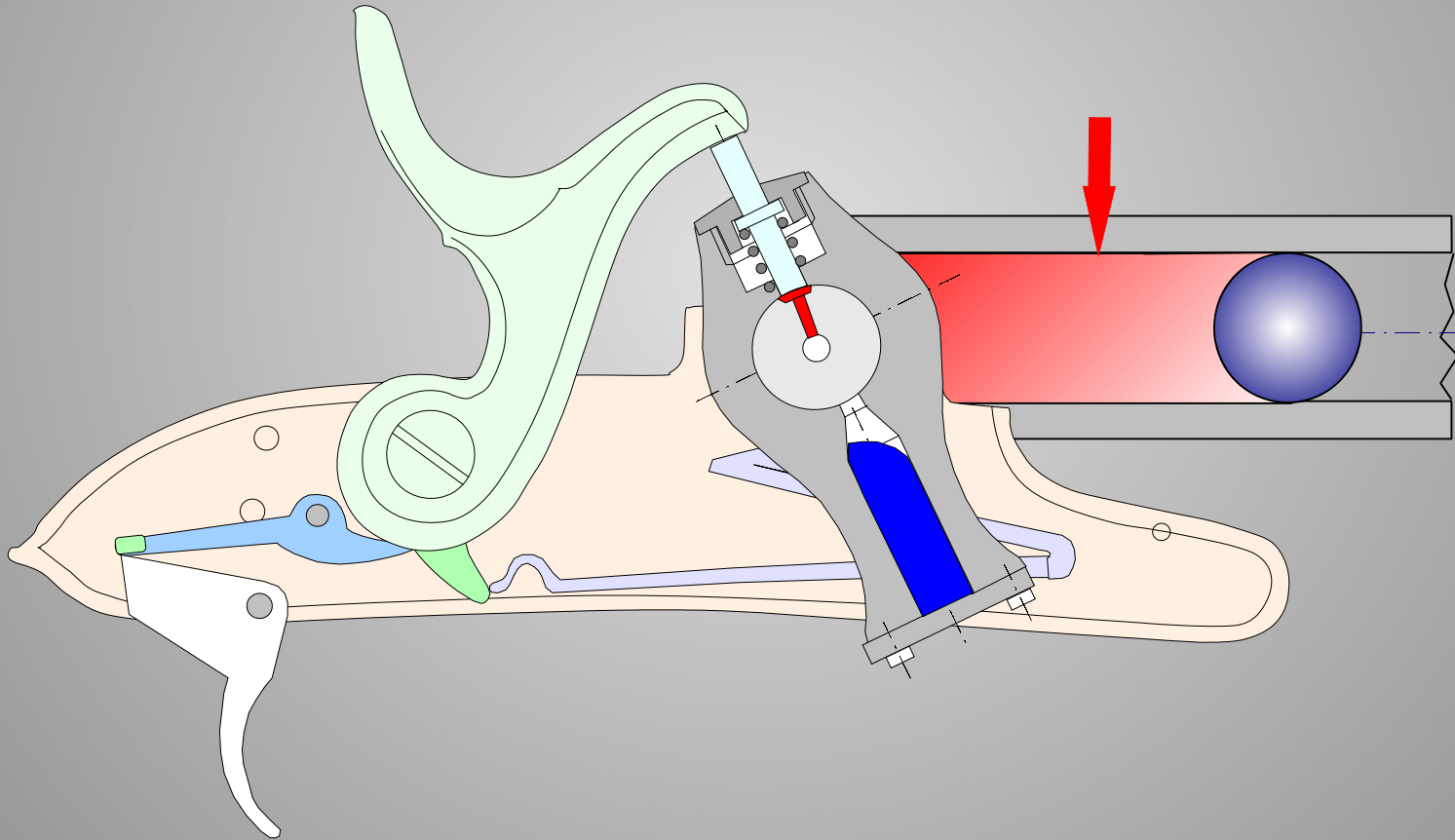
Hammer strikes on the firing pin



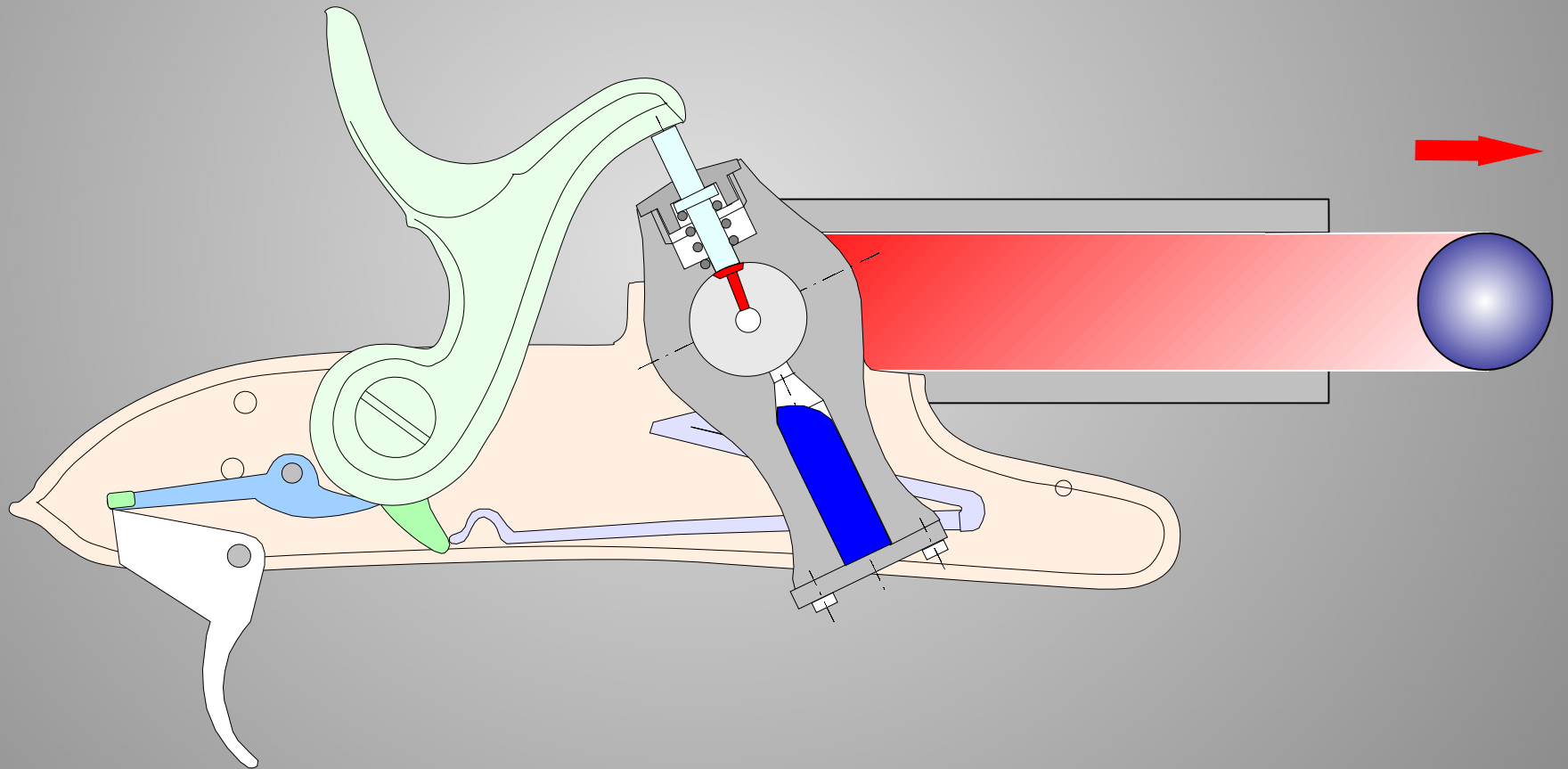
Fulminate explodes due to the impact



Charge in barrel gets ignited



Bang !!



End