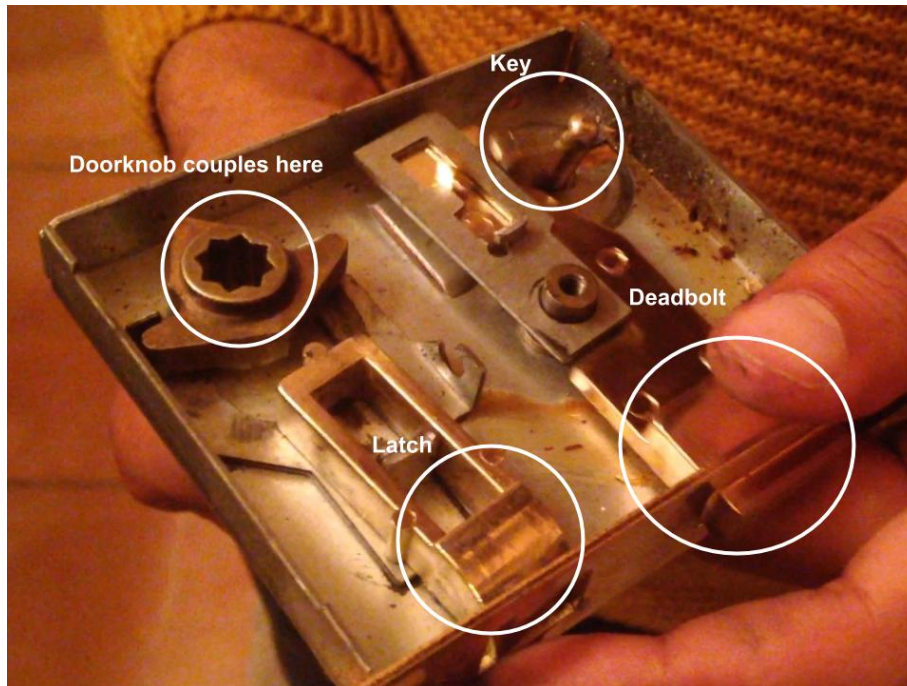


2.77 Seek and Geek #8: Old door lock

Like most buildings in the Boston area, the house I live in is over a century old. My roommates and I have been having problems with the bathroom door lock since we moved in. Fortunately, the majority of the bathroom has been upgraded long after the house was built, but the doorknob and lock happen to be pretty old. Last week, we had the opportunity to explore the innards of an old lock when ours broke and we had to open it up to fix it.



This photo is labeled with the key components of the inside, and this video (<https://www.youtube.com/watch?v=eE8xQisAyrM>) gives a better sense of how it works.

The latch is pretty intuitive. There is room for a small spring (not shown) inside the rectangular cavity, similar to a stapler. The spring preloads the latch outward, and when the doorknob is turned either way the seesaw-looking part pulls the latch backward against the spring.

The deadbolt mechanism is more interesting and unintuitive, and best understood after watching the video. The lock has a protruding pin that runs along a track with slots at the end. The pin is attached to a spring that wants to force it into one of the slots. Turning the key pulls the spring and guides the pin along the track to the other state.

The pictured assembly goes inside the wood of the door, sandwiched between the doorknobs on either side.