

## Assignment 7: Printable Tool

The knife that I chose to print by Nevil Clavain is actually a modified rendition of an earlier knife created by a user named Caboose. Clavain's rendition has a serrated blade and minor structural differences.

After printing my knife, I noticed that both of the two pins that were to be placed through the handle and blade were too big for the holes they need to put in. Instead of using the pins, I used two screws to hold the pocketknife together. While assembling the knife, I accidentally broke the safety notch off of the blade. Additionally, I noticed that the safety tab that's used to prevent the knife to fold while it's in use is flimsy. It works sometimes, but only when it's positioned correctly. I'm positive that with only a little force, one could easily snap the safety tab. This could be dangerous because the knife could possibly fold onto the user's fingers with the same amount of force that they are applying to the knife. The serrated blade is sharper than I had imagined it would be. While it may not be as sharp as a real knife, it can most certainly still do some damage. The handle doesn't feel sturdy enough for something that will probably be used with some degree of force. I often feel that whole knife will snap while I'm using it.

I used the knife to cut a sandwich, a piece of tape, and a 1/4" thick piece of wood. The sandwich took a tad bit more effort to cut through than if I were to use a real knife but nonetheless, it still cut evenly and neatly. The tape was easy to cut thanks to the serrated blade, but I left a zigzag patterned cut on the tape. The knife met its limits when I attempted to cut the wood. It cut about half an inch before the blade was no longer serrated.

If I had to alter this knife, I would make the handle, as well as the safety tab, thicker and sturdier.

**1. Object/Tool:** *"Liner Lock Pocket Knife w/serrated"*

**Creator:** Nevil Clavain

<http://www.thingiverse.com/thing:123591>

**2. Object/Tool:** *"Liner Lock Pocket Knife"*

**Creator:** Caboose

<http://www.thingiverse.com/thing:117265>