

P51: The main constraint of canned food is that the can must be opened for the food to be consumed. Some cans have tabs to make opening them easier, but the ration cans don't appear to have this feature. Canning can also destroy vitamins such as Vitamin C. The metal cans likely add up to more weight than shipping the food as is, which can be costly. However, the long shelf life of canned food makes it a good choice for shipping to far-away places. The constraints of the P51 include having one short blade (most likely for safety), having to manually slide either the P51 or the can to open a new section of the can (don't have to do this for the knob turn can openers), and little surface area available for gripping.

Scissors

Affordances:

There are two holes, a smaller rounder one and a larger oblong one, that afford holding by putting your thumb through the smaller hole and fingers through the larger. The blades afford cutting because they are sharp. There is a non-sharp side covered in plastic that affords that the part a person touches should be there (rather than the blades). The pivot/hinge affords that the blades must be opened and shut to cut things, and that the side with the holes should move to force the blades to move. In my scissors' case, the shape of the handle affords right handed cutting. The scissors can still be held in the left hand, just less comfortably.

Historical:

Blades preceded scissors, but scissors aren't a young invention. Spring-type scissors (two blades connected with a C shaped piece of metal) originated in the Bronze Age. Many regions used them including the Middle East, Europe, and East Asia. Scissors evolved to use an open/close hand motion rather than a squeeze, although spring-types do still exist. In the 19th century, many scissors were handmade with ornate details, but this was later simplified so that scissors could be mass produced.

Constraints:

Scissors can't cut large stacks of paper or thick objects. For that, a single larger blade is needed at the expense of safety. For my scissors specifically, the object being cut can't be flush against another surface because opening your hand to get ready to cut would force you to bump the handle on that surface. Surgical scissors with the blades at an angle are an example of scissors without this constraint. My scissors were also made with preference for right handed cutting, which is a slight constraint for left handed people. No environmental elements are necessary to use scissors, but depending on the metal used it might be better to keep them dry or else they might rust.

Cultural Constraints:

Scissors have had a very interesting effect on culture. "Scissor" has become a verb meaning a specific way of moving one's legs. Rock Paper Scissors is a game most people know, with what many view as scissors' main function, cutting paper, coming into play. There are also many superstitions surrounding scissors. For example, opening and closing scissors at a wedding in some African cultures can make the groom unable to consummate the marriage. Many cultures think dropping a pair of scissors will bring bad luck, especially if they land upright with both points embedded into the floor. Other superstitions state that scissors can be used as protection from evil spirits.

Sources:

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<https://www.vampiretools.com/blog/now-something-completely-different-scissors-superstitions/>

<http://oddrandomthoughts.com/superstitious-beliefs-about-scissors/>

