

Manual Can Opener

Student's Name

Institutional Affiliation

Course Code

Due Date

Manual Can Opener

When Ezra J. Warner invented the can opener on January 5, 1858, he was a native of Waterbury, Connecticut. The metal cover of the can is punctured and ripped off using this gadget, making it much easier to open canned products. Manual can openers are easy compared to electric or other gadgets. Not all basic things are equal. Cheap can openers may be awkward and hard to operate, while costly ones work smoothly and endure for years.

Electric and manual can openers are the two main varieties (Kay & Blasing, 2017). Two levers, a handle, a wedge, and an axle and wheel are all that are required to operate each.

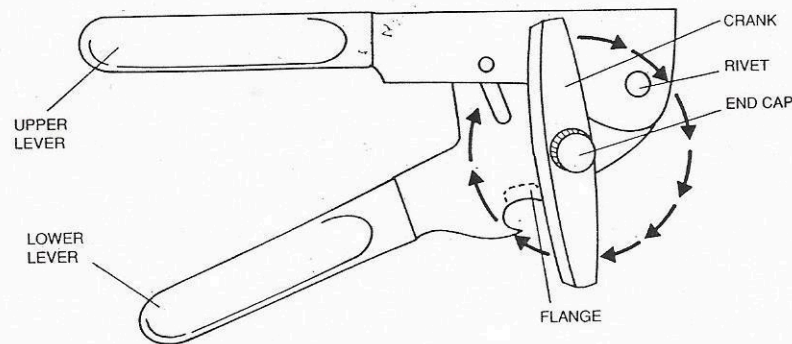


FIGURE 1

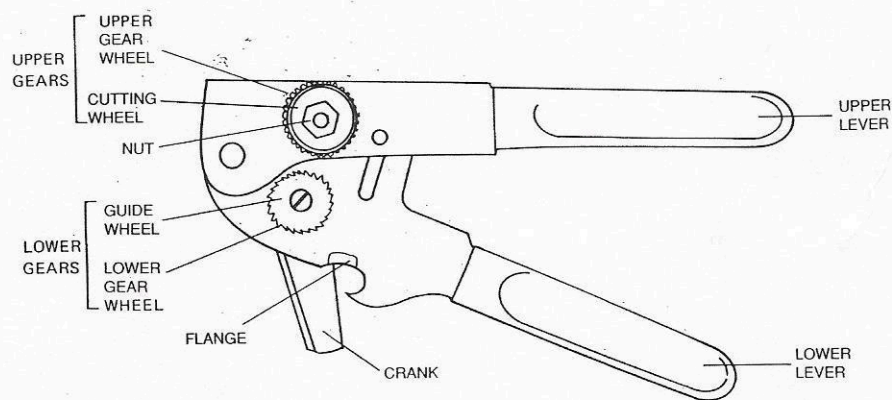


FIGURE 2

Component Description

Levers: Figure 1 shows the form of the levers in a manual can opener. When the can is in position, the user can squeeze the levers together to hold the can stable (Kay & Blasing, 2017). The handle may now be operated with the user's other hand.

Crank: Hand crank is linked to one of the handles for ease of use. Through the handle, the crank's axle is coupled to the traction gear (Kay & Blasing, 2017). Open a can by dissecting the handles of the opener, putting a cutting wheel above the lip and a traction gear below, then bringing the handles together, squeezing the can's lip between them until it pops out. When the opener is in this position, you may use the crank to move the traction gear and the cutting wheel around the can's rim.

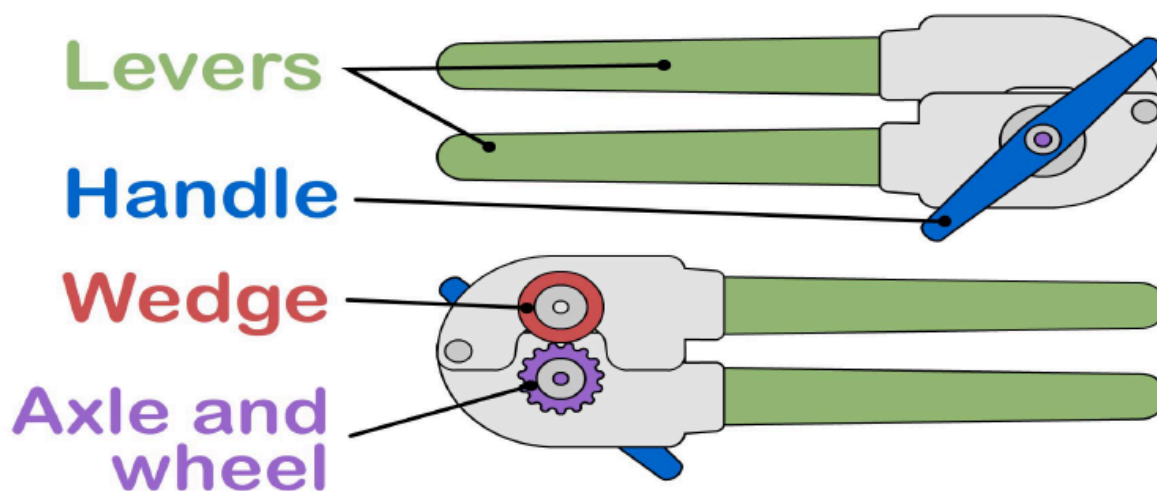
Handle: The handle is connected to the axle and wheel on the other side with single rivet or bolt by passing via the levers (Kay & Blasing, 2017). To make the wedge, axle, and wheel work, you must rotate it clockwise.

Wedge: In order to cut the can, a sharp circular wheel called a wedge is used (Figure 1). In addition to being attached to the handle, the axle and wheel are in perfect alignment with it. The wedge begins cutting into the can when the handle is rotated (Kay & Blasing, 2017).

Cutting Wheel: The whole circle of the cutting wheel is sharply angled (Kay & Blasing, 2017). When you shove the cutting wheel against the metal of the can by pulling the handles of the opener together, it's sharp edge slices through the metal. You change the traction gear by rotating it and the cutting wheel moves around the lip of the can, cutting through the metal.

Axle and Wheel: The wedge is aligned with the spurred-like gear known as the axle and wheel (Figure 1). When the handle is rotated, two components are simultaneously turned by the mechanism. Cans are cut into wedges by rotating the can opener's handle (Kay & Blasing, 2017).

Traction gear: In order to strengthen its grip on the can's lip, the traction gear is a tiny, circular metal wheel with notches. Pressure from the traction gear on the metal can enables it to hold it as you spin the crank, making it easier to remove debris from the can's inside (Kay & Blasing, 2017).



Conclusion and Operating Description

You must first open the levers (Figure 1) of the manual can opener and then insert a can on the wedge (Figure 1) of the can opener. Axle and wheel alignment (Fig. 1) will be easier if you do this before cutting the can. Keep the can stable by squeezing the levers together, and then spin the handle (Figure 1). An axle and wheel will be rotated to allow the can opener's blade to penetrate its own lid. The top will come off the can opener once it has rotated all the way and the can has been sliced open. To avoid injury, take caution while discarding the lid, which has a sharp edge. Finally, the operator may savor the can's contents.

References

Kay, E. J., & Blasing, T. J. (2017). Bottle and can openers. *American Scientist*, 105(3), 131-133.