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# Recycling Tidbits

## The Delicious History of Tin Cans

### Inside this Issue

Saving Energy	2
Crafty Cans	2
Tin Can Luminaries	3
Can Openers	3

Tin cans have revolutionized the way we eat and preserve food. But who came up with the idea of food preservation and why? It all began in 1795 when Napoleon Bonaparte offered a prize of 12,000 francs to anyone who could invent a method to preserve food for the army and navy. A jack of all trades and former candy maker, wine maker, chef, brewer and pickle maker, Nicholas Appert toyed with the idea for 15 years before he came up with preservation by sterilization. Similar to today, he sterilized food by boiling it in glass jars, only he sealed the jars with a cork. The sterilized foods were sent along with the navy for 4 months to test their effectiveness. Appert successfully found a way to preserve food! Even though Appert didn't use tin cans he is credited as being the "father of canning".

Later that same year an Englishman, who intended to surpass Appert, fashioned containers out of tinplate. These containers were tin-plated wrought-iron cylindrical canisters

with a soldered lid. The tin was used to prevent the iron from rusting and corroding. To open these cans one would use a chisel and hammer. Eventually blacksmiths began crafting tin cans as we know them today. At the time even the most skilled blacksmith could only produce about five cans per day. Today, about 400 cans can be manufactured in one minute.

Tin cans were introduced to the United States in 1818. They became widely popular in the 1820's when two New Yorkers were "awarded the U. S. patent for preserving food in 'vessels of tin' by President James Monroe in 1825." (Can Manufactures' Institute)

The Civil War is what really paved the way for tin cans because soldiers relied on rations packaged in tin. By the wars' end, in 1865, the can opener was invented making canned goods a staple in soldier's homes. The Civil War's demand for metal also resulted in thinner, lighter cans. They

found they could use less tin and steel and still make a sturdy container. By the end of the Civil War tin can production was up from 5 million a year to 30 million.



WWI soldiers eating rations.  
Picture courtesy of <http://www.express.co.uk/>

Tin cans were once again tailored to use less metal during World War II. This is also around the time that polymer (plastic) coatings were introduced. Over the years polymer coatings have "contributed to better can integrity, shelf-life and resistance to corrosion" (Can Manufacture Institute).

Over time manufactured cans became lighter and lighter. Today's cans are actually 33% lighter than 25 years ago. However, it wasn't until 2004 when the next big innovation was introduced; the easy open lid that removes the need for a can opener.

### Stump the Grump

True or False

70% - 80% of steel ever produced is still in use



today.

False, 80% - 95% of steel ever produced is still in

Dunn County Solid Waste Division \* Editor: Recycling Specialist, Amanda Haffele

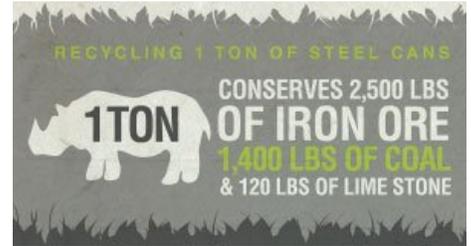
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# Saving Energy

According to Keep America Beautiful recycling one tin can saves 60 to 74 percent of the energy used to make a can from virgin materials. In fact, recycling one can saves enough energy to power a TV for three hours and seven cans save enough energy to power a 60 watt light bulb for 26 hours. In 2014, Dunn County residents' recycling of steel cans saved enough energy to watch television for 70,636 hours and to power a 60 watt light bulb for 87,616 hours! Don't forget that empty aerosol cans

may be recycled, too! Like tin cans, aerosol cans are made of steel and are very valuable to the scrap industry. Before recycling, make sure aerosol cans are empty, the nozzle is removed and the plastic lid is tossed in the trash.



# Crafty Cans

There are many fun ways to reuse tin cans. Here are a few of my favorite Pinterest finds!

## Cutlery Cans



<http://www.home-dzine.co.za/crafts/craft-cutlery-holder.htm>

## Tuna Can Lantern



<http://inmyownstyle.com/2011/06/trash-and-thrift-store-treasure-outdoor-candle-lantern.html>

## Vases



<http://foxhollowcottage.com/2012/08/tincancraft-treuserecyclerepurposeupcycle.html>

## Painted Centerpieces



<http://www.jayneweddings.com/gallery/styling/katie-jordan-eshoot/>

## Flower Caddy



<http://www.bystephanielynn.com/2010/06/recycled-tin-can-flower-caddy.html>

## Container Garden



[https://www.flickr.com/photos/happy\\_sleepy/827459282/in/photostream/](https://www.flickr.com/photos/happy_sleepy/827459282/in/photostream/)

Follow us on Pinterest to find links to all these great craft ideas and many more!

[pinterest.com/dunnrecycling](https://www.pinterest.com/dunnrecycling)

# Tin Can Luminaries

There are many methods being used to make can luminaries. Some use a drill and an empty can, or a hole punch, a hammer and nail with frozen water and sand inside (that's what I did to make mine) while others use a hammer & nail with an empty can. However you make your luminaries, I'm sure they'll be beautiful!

Check out these great ideas. The next three luminaries were made with frozen water and sand.



<http://www.boho-eddings.com/2012/07/31/diy-tutorial-tin-can-lanterns/>



<http://www.designsponge.com/2010/07/diy-project-karens-coffee-can-lanterns.html>

A whole punch created these!



<http://www.craftsunleashed.com/craft-basics-main/tin-can-crafts-luminaries/>

A drill was used to make these.



<http://www.100layercake.com/blog/2009/06/23/diy-tin-can-table-numbers/>



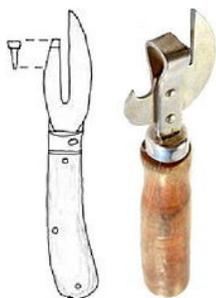
[http://www.craftfoxes.com/how\\_tos/making-lights-diy-tin-can-lanterns](http://www.craftfoxes.com/how_tos/making-lights-diy-tin-can-lanterns)

The next lanterns were made by placing a wooden timber on the inside for support.

# Can Openers

The first can opener was invented in 1865 and has been modified many times since then.

To the right is one of the earliest designs. These openers would cut down through the top of the can, leaving many sharp edges.



Here's another early opener using

the same concept of sharp knives and a lever system.



This design is my favorite because it resembles a bull.

The first electric can openers were manufactured in the 1930's. They weren't very popular until Walter Hess Bodle and family invented the first free standing electric can opener

and knife sharpener in 1956. This machine came in three lovely colors; avocado green, flamingo pink and my favorite, seen below, aqua blue.



Pictures courtesy of medlibrary.org and esty.com.