

Canning Jars: The Test of Time

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Educational Objectives

1. Increase knowledge of the canning jar origins.
2. Identify the versatility of the canning jar.
3. Explore the canning jar craft era.

Throughout the years the canning jar has been used for countless things ranging from food preservation to crafts. Canning jars today go beyond food preservation and can be used for creative décor and gift giving. Enjoy investigating their Napoleonic beginnings, learning about the race for improvements and joining the canning jar craft era!



Napoleonic Beginnings

Napoleon secured his place in history through more than just his political and military achievements. Few may know, but he played a vital role in the development of canning. Napoleon is quoted saying, “An army travels on its stomach.” He knew that having brilliant military plans and strategies would not amount to anything if he did not have strong healthy soldiers. Common food preservation practices of the time were drying, pickling and salting. These practices did not have the shelf life that the military needed for their long voyages. Many armies during this time lived on whatever food they could pillage, steal or buy. In 1795, on behalf of the French military, Napoleon offered 12,000 francs to the person that discovered a new way to preserve food.

Nicholas Appert rose to the challenge and conceived the idea of preserving food in glass jars. He experimented with his idea for 15 years. The method he introduced involved heat-processing food in glass jars reinforced with wire and a wax seal. This created an air-tight container and would preserve the food for consumption.

As more of the world was explored and provisions were needed to supply armies, the need for canned foods continued to increase. The glass jars used to preserve the food were easily breakable and an English man by the name of Peter Durand introduced a method of

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sealing food in tin cans. This allowed soldiers to carry their rations with ease. At this time, the can opener had not been invented and soldiers had to use their bayonets or smash the cans against rocks to open them.

Thomas Kensett is credited for establishing the first cannery in the United States in New York in 1812. He learned the art in England before immigrating to New York. Kensett and his father-in-law were the first, on record, to can salmon, lobster and oysters. In 1825, they applied for a tin canning patent and established their factory.

However, records say that Raymond Chevalier-Appert patented the pressure retort (canner) in 1851 to can at temperatures higher than 212 degrees Fahrenheit.

No one knew the science behind canning until Louis Pasteur, in 1864, discovered the relationship between microorganisms and food spoilage/illness. Only in 1920, the identity of *Clostridium botulinum* was revealed and its significance to this method of food preservation.

John Mason

Canned food remained a novelty and was out of reach for farm families and those too poor to buy it. That all changed in 1858 when John Mason invented a glass jar that would seal tightly because of a screw-on thread molded into its top. This made the process easier and allowed for reusable parts. Years later, Mason added a removable rubber ring to the process that provided an even more effective seal. Mason's jars helped revolutionize food preservation in both America and Europe. John Mason held a patent on his invention. Despite the growing popularity of canning in urban and rural areas, Mason's invention never made him rich. He died at the age of 70 in New York as a beggar.

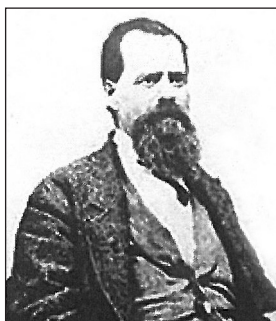


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The Race is On

In 1879, the Mason jar patent expired and the race was on. Many manufacturers began reproducing the jar that had become a household staple. When manufacturing their jars they added their own improvements and variations.

William Charles Ball and his four brothers started the Wood-Jacketed Can Company in 1886 and started buying smaller companies to help mass produce their version of the canning jar. Due to their success, it was not long before the name Ball became a synonym for Mason when referring to canning jars.

Several years later, Alexander Kerr created what we know today as the wide mouth jar. He also introduced the self-sealing canning jar with a rubber gasket attached to the lid. By attaching the rubber gasket to the lid of the jar it streamlined the canning process. To take it one step further, Kerr took his idea and applied it to a flat metal jar lid that was separate from the threaded ring. Removing the ring after the jar sealed helped to prevent moisture and hidden bacteria from spoiling the contents of the jar.

Mid to Late 1900s

By 1922 people were sharing canning jar recipes and ideas in newspapers, magazines and books. *Fruit, Garden & Home Magazine*, today known as *Better Home & Gardens*, frequently featured information and recipes for canning.



During World War II, families were encouraged to grow their own food to limit their reliance on limited food rations. The government strongly promoted victory gardens to increase food production during the war. To relieve the pressure on the canning industry that was supplying the military, they started circulating pictures that depicted canning as being patriotic. During this time Americans purchased more than 3 million canning jars.

In 1950, refrigeration was introduced and became the popular method of food preservation. In 1990, Martha Stewart launched her television show and magazine, which sparked the interest in canning again. She would provide a variety of canning recipes for patrons to try.

To promote canning practices and prevent food-borne illnesses, in 2000 several universities and institutions created The National Center for Home and Food Preservation. Their website provided up-to-date, research-based recommendations for most methods of home preservation.

Pinterest Era

Pinterest launched on March 1, 2010 and created a surge of shared do-it-yourself projects. This opened a whole new world for canning jars. The Mason jar is a crafting staple that is pinned time and time again. They have created hobbies for sewing, event and home decorating, cooking, painting, gardening and so much more.



The Test of Time

The canning jar dates back hundreds of years. Over time the canning jar has adapted from its original design, underwent several modifications, has become useful for crafting

and is still used for food preservation. Mason, Ball and Kerr are all household names and will continue to be used for years to come.

Activities

- At the beginning of the lesson, ask members to share their experiences with canning jars and what they represent to them.
- During your club meeting you could select a craft from below to create or find another idea on [pinterest.com](https://www.pinterest.com).

Mason Jar Luminary

1. Begin by cutting a maple leaf out of adhesive vinyl. Apply the leaf to the jar.
2. Pick an acrylic paint color that you want to use, and paint the exterior of the jar. Be sure you allow the paint to dry completely between each coat.
3. Once it is dry, gently peel away the vinyl leaf. Touch up any rough edges.
4. Add some corn kernels to the bottom and place the votive candle inside. Finish off with some twine or ribbon around the top of the jar.



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Christmas Lid Ornaments

You'll need:

- Inner lid and ring
 - Old greeting cards
 - Glue and glitter
 - Hammer and nail
 - Faux greenery and berries
 - Other items to decorate with (i.e., paint)
1. Nail a hole in the top of the lid for the hanger.
 2. Apply a few coats of paint to the lid and then draw the face. The nose is made from a small triangle of orange felt.



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3. Next, brush school glue lightly on the cheeks and around the outer edge.
 4. Last, sprinkle white glitter over the glue area.
- Share approved canning recipes with your club. Recipes can be found at <http://www.freshpreserving.com/recipes> or http://nchfp.uga.edu/how/can_home.html.

Mixes in a Jar

Combine all non-perishable ingredients in a jar, attach a recipe card to the jar and gift it to a friend!

Recipe for Apple Crisp:

- 2 cups all-purpose flour
- 1 cup firmly packed brown sugar
- 1 cup old-fashioned rolled oats
- ½ teaspoon ground cinnamon
- ½ teaspoon salt
- ¼ teaspoon ground nutmeg
- 1 cup chilled butter or margarine
- 1 cup chopped pecans

To give as gift, place two cans of apple pie filling in a gift basket with a mix. Add decorative potholders and a wooden spoon.

To serve, spread two cans of apple pie filling in a lightly greased 13-by-9 inch baking dish. Sprinkle topping over apples. Bake in oven at 400 degrees Fahrenheit for 19 to 21 minutes or until filling bubbles and topping is golden brown. Serve warm.

Resources

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