

# Clarence Birdseye: Frozen Food Innovator



FOOD DUDES

Joanne Mattern



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# Brooklyn Boy

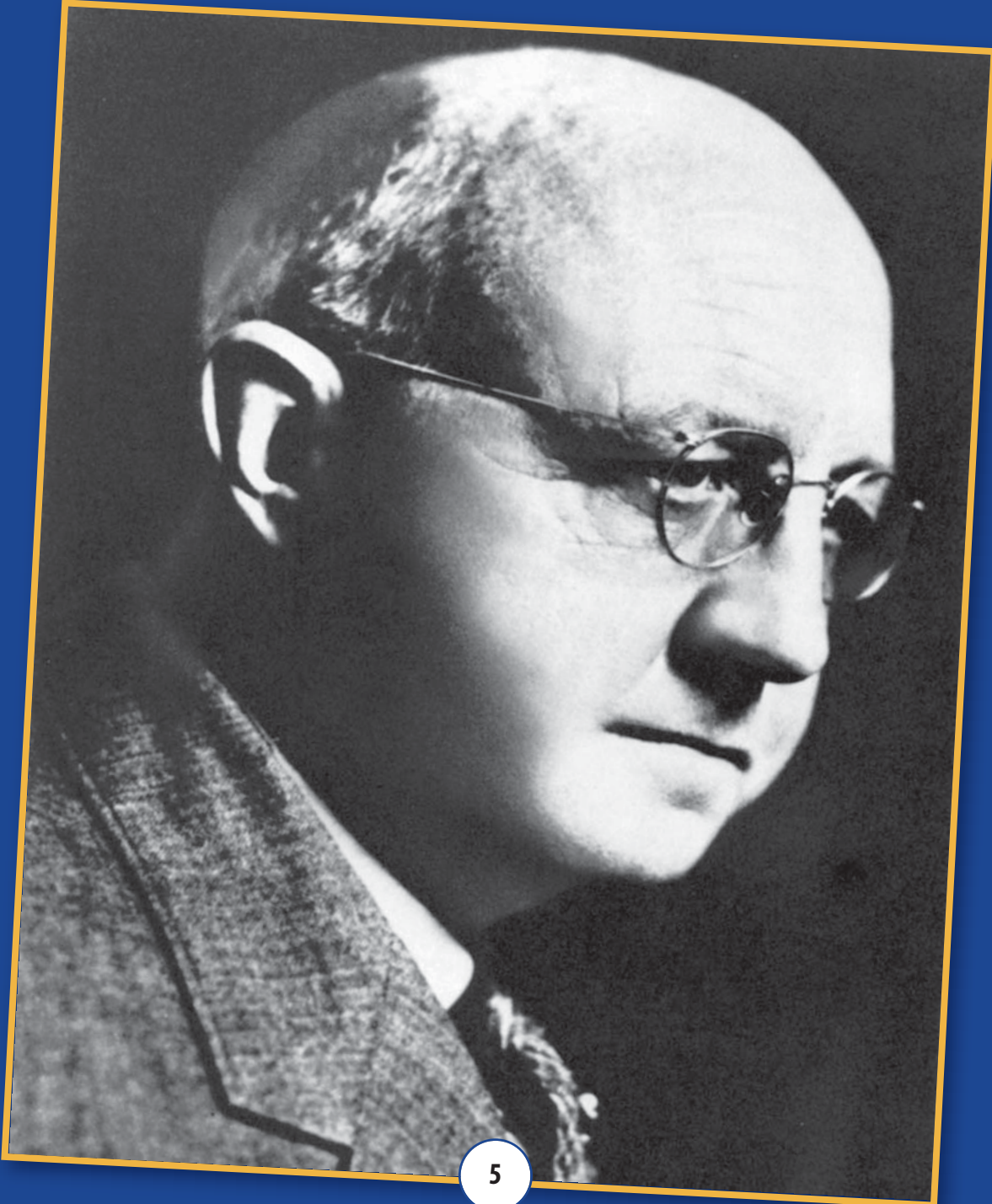
Chances are, your home's freezer is full of yummy items that can be prepared in minutes. Clarence Birdseye made this possible. He found new ways to freeze foods and bring them to the public. His inventions changed the food industry. Today, we depend on convenient foods to make our busy lives easier.

Clarence Frank Birdseye was born in Brooklyn, New York, on December 9, 1886. Clarence was named for his father, who was a lawyer. His mother was Ada Underwood Birdseye. She was the daughter of an inventor and manufacturer. Clarence grew up in a big family. He was one of eight children.

In addition to their home in Brooklyn, the Birdseye family had a farm. It was on Long Island in New York. Clarence and his brothers and sisters enjoyed many summers there.

*Clarence Birdseye*





# Growing Up

As a boy, Clarence spent most of his time outside. At the farm, he explored the fields and the woods. He also went down to the beach and roamed along the seashore.

Clarence loved nature. He learned about animals and how they live in the wild. Clarence also studied taxidermy. He became skilled at stuffing and mounting animals for display.

After several years in Brooklyn, the Birdseye family moved to Montclair, New Jersey. There, Clarence discovered he was interested in more than just animals. He also liked cooking! So, Clarence signed up for a cooking class at school.

Clarence graduated from Montclair High School in 1908. Next, he decided to attend Amherst College in Amherst, Massachusetts. Most of the men in his family had attended this school.





*Today's Montclair High School is much larger than the one Clarence attended.*

# Odd Jobs

Clarence had to help his family pay for his education. So before starting college, he worked in an office in New York City, New York. Soon, Clarence found more unusual ways to make money in the city. He trapped frogs and rats! He sold the frogs to the Bronx Zoo for reptile food. He sold the rats to a scientist at Columbia University.

At Amherst, Clarence studied many types of sciences related to animals. He enjoyed learning about mammals, birds, and insects. His friends even nicknamed him Bugs. Then in 1910, Clarence had to drop out of college. He and his family could no longer afford to pay for his education.

After leaving school, Clarence needed to find work. He wanted a job that put his knowledge of animals to good use. He began working as a field naturalist for the U.S. Department of Agriculture.

This job required Clarence to travel through Arizona and New Mexico. There, he collected birds and other animals for the government to study.

Life was difficult out in the desert. But Clarence didn't mind. His surroundings were interesting. And, he used his cooking skills to survive. One time, he made a tasty meat soup. It contained mice, chipmunks, rats, and gophers!

*While in the desert, Clarence kept detailed journals of his discoveries.*



# Fur Trader



*Even today, much of Labrador remains unpopulated wilderness.*

In 1912, Birdseye met Eleanor Gannett while in Washington, D.C. They soon fell in love. Birdseye wanted to marry her. But, he knew he couldn't afford to support a family.

Then, Birdseye learned that fur traders in Canada made a good living. So, he

joined the Hudson Bay Trading Company. The next year, he moved to Labrador in eastern Canada. There were many wild animals in Labrador. Birdseye bought and sold their furs for money.

At that time, Labrador offered Birdseye much adventure. There were no cars or trains in the wilderness. So during the summer





months, Birdseye traveled by boat. In the winter months, he traveled by dogsled.

Eventually, Birdseye had enough money to marry. Back in the United States, he and Eleanor wed on August 21, 1915. The next year, the Birdseys welcomed their first son, Kellogg. Birdseye wanted to return to Labrador. So just a few weeks later, he moved his family there.

*Birdseye wore sealskin to stay warm during Labrador's cold winters.*

# Life in the Wild

Birdseye was happy to have his wife and son with him in Labrador. However, he worried about how to take care of them. There were no stores in the area. The family had to catch or grow all their own food. Birdseye needed to find a way to store food and keep it fresh.

Birdseye observed how the native Inuit people provided for themselves. They ice fished in winter. At that time of year, the air was extremely cold. It froze the fish as soon as they were pulled out of the water!

Later, Birdseye thawed and ate some of this fish. He noticed it tasted almost as good as fresh fish. Birdseye experimented with bird and caribou meat as well. He tasted meat frozen at different times of year. Birdseye discovered that meat frozen in the extreme winter cold tasted best.





*Birdseye used inspiration from the Inuit fishing method to later create his freezing inventions.*

# Understanding Freezing

Birdseye thought about his experiments with frozen foods. He realized that meat froze most quickly in extreme winter cold. His science background helped him understand why this mattered.

When food freezes slowly, large ice crystals form. These large crystals damage the food, making it look and taste bad. When food freezes quickly, only small ice crystals can form. These do not damage the food the way large crystals do.

At the time, frozen food was not popular. It simply didn't taste good. Birdseye concluded this was because the food was frozen too slowly. He believed people would eat more frozen food if it tasted better. So, he kept experimenting.

Next, Birdseye tried freezing vegetables. He washed some cabbages in salt water and froze them in the cold air. Later, he thawed out some cabbage and ate it. The cabbage tasted great!

Now Birdseye was certain that food must be frozen quickly. Then, meats and vegetables would look and taste fresh when cooked. Birdseye thought about starting a frozen-foods business. However, his plan had to wait.