
*Behind every invention
there is a story...*

A Graphic Novel Exploration of Accidental Inventions



The Arrival
Shaun Tan

Creating the Graphic Novel

- 1) Read the Story
- 2) Reflect: What is the big idea? How was the invention created or discovered?
- 3) Synthesize the story into a list in chronological order
- 4) Create a title for your story
- 5) Plan your layout; What is the main idea behind each frame?
- 6) Fill in the details; How will you add the background details to each frame?
- 7) Conventions of Graphic Novel
- 8) Draw, write, color



American Born Chinese
Gene Luen Chan

1) Invention: Earmuffs

([adapted from about.com](#))

Something was running through 13 year old Chester Greenwood's head one cold December day in 1873 in Maine, USA. To protect his ears while ice skating, he found a piece of wire, and with his grandmother's help, padded the ends. In the beginning, his friends laughed at him. However, when they realized that he was able to stay outside skating long after they had gone inside freezing, they stopped laughing. Instead, they began to ask Chester to make ear covers for them, too. At age 17 Chester applied for a patent. For the next 60 years, Chester's factory made earmuffs, and earmuffs made Chester rich.

2) Invention: Bandaid

([adapted from about.com](#))

At the turn of the century, Mrs. Earl Dickson, an inexperienced cook, often burned and cut herself. Mr. Dickson, a Johnson and Johnson employee, got plenty of practice in hand bandaging. Out of concern for his wife's safety, he began to prepare bandages ahead of time so that his wife could apply them by herself. By combining a piece of surgical tape and a piece of gauze, he fashioned the first crude adhesive strip bandage. His wife used them whenever she got cut or burned, and it went on to be one of the biggest invention in the history of the company.

3) Invention: Anesthesia

([adapted from Readers Digest](#))

It was 1844 and Horace Wells, a dentist, was at a party. As was fashionable at the time, some people at the party were inhaling nitrous oxide, which was a gas that made you laugh uncontrollably. People thought it was great fun. One of Horace's friends inhaled some gas and then somehow cut his leg, very badly. Horace noticed that the friend seemed to not notice the cut, and feel no pain, despite it being very serious. Nitrous Oxide thus became a very early form of anesthesia to help patients during painful surgeries.

4) Invention: Chewing Gum

([adapted from Readers Digest](#))

In 1870, Thomas Adams was working with chicle, which was the sap from a south American tree. He was trying to use the sap to create a new form of rubber. However, nothing he tried seemed to work. One day, after another failure, he put a piece in his mouth and began to chew. He liked it! It was tasty and it never disappeared. Thus, Chiclets, or the first chewing gum was created.

5) Invention: Dynamite

(adapted from Stuff of Genius)

Alfred Nobel, a Swedish chemist and engineer, was trying to stabilize nitroglycerin, an explosive liquid. Nobel and laboratory workers experienced several accidents -- one of which ultimately proved fatal. An explosion in Stockholm, Sweden, left Nobel's younger brother and a few others dead in 1864. Some say that Nobel discovered the key to stabilizing the substance through another accident. While transporting nitroglycerin, Nobel noticed that one of the cans accidentally broke open and leaked. He discovered that the material in which the cans were packed -- a sedimentary rock mixture -- absorbed the liquid perfectly. Nobel came up with a working model of the rock mixture that allowed the nitroglycerin to be stored, and when lit with a flame, to explode when you wanted it to.

6) Invention: Microwave Oven

(adapted from Stuff of Genius)

During WW2, a leading scientist at one of America's leading laboratories was working with a machine that created Micro Waves that were used to show images on radar. As he was standing next to this machine, he realized that a candy bar that was in his pocket melted. The waves were sending out power which heated items. Curious, he tried it again with popcorn, and it worked. Soon, he created a machine that would control these waves and could be used to heat food. The original microwave oven was huge, but over time, it got smaller and could fit into people's homes.

7) Invention: Velcro

(adapted from Stuff of Genius)

George de Mestral was out walking his dog one day. When they returned home he noticed how perfectly the cockleburs stuck to his dog's fur. He got out his microscope and investigated the burr closer. He discovered that the burr was covered not in little spikes, but rather in little hooks, that would grab the fur, or his clothing. He started experimenting and making little hooks until he found that the hooks were strongest when they grabbed nylon fabric. He called it Velcro.

8) Invention: X-Rays

(adapted from the Christian Science Monitor)

It was the late 1800's, and German physicist Wilhelm Röntgen was experimenting with cathode-ray tubes, basically glass tubes with the air sucked out and a special gas pumped in. When Röntgen ran electricity through the gas, the tube would glow. But something strange happened after he surrounded the tube with black cardboard. When he turned on the machine, a chemical a few feet away started to glow. The cardboard should have prevented any light from escaping, so what caused this distant glow? Little did he know that the tube

had been sending out more than just light. It shot out invisible rays that could pass right through paper, wood, and even skin. The lab chemical that lit up – the one that tipped off Röntgen – reacted to these rays. He called the phenomenon X-rays. The X stood for "unknown." Röntgen used this idea to capture the first X-ray images, including a shot of his wife's hand. Upon seeing this skeletal image, she exclaimed, "I have seen my own death!"

9) Invention: Play-Doh

(adapted from Christian Science Monitor)

Before World War II, coal was commonly used to heat homes, which left terrible black stains on walls. Noah and Joseph McVicker of Kutol Products, created a doughy material to rub the soot off wallpaper. However, after the war, natural gas became a more common heat source. As coal was phased out, few people needed Kutol's cleaning product. The company faced bankruptcy. In the early 1950s, Joseph McVicker's sister took some of the dough to her classroom and used the material as a modelling clay. The only problem, it smelled really bad! So, they added a new chemical into to give it a new smell, and Play-Doh was born.

10) Invention: Potato Chips

(adapted from Christian Science Monitor)

The first potato chips were meant as a joke. Hotel chef George Crum was a great cook. He cooked in a very upscale restaurant with very demanding customers. In 1853, a cranky guest complained about Crum's fried potatoes. They were too thick, he said. Too soggy and bland. The customer demanded a new batch. Crum did not take this news well. He was angry. He decided to play a trick on the diner. The chef sliced a potato paper-thin, fried it until a fork could shatter the thing, and then purposefully over-salted his new creation. He thought the customer would hate it, and get even angrier. He would have a good laugh about it! But, the guy loved it! He ordered a second serving. Word of this new snack spread quickly, and Saratoga Chips, as they were called on the menu, became a huge hit, and transformed the snack industry forever.