



MACHINES

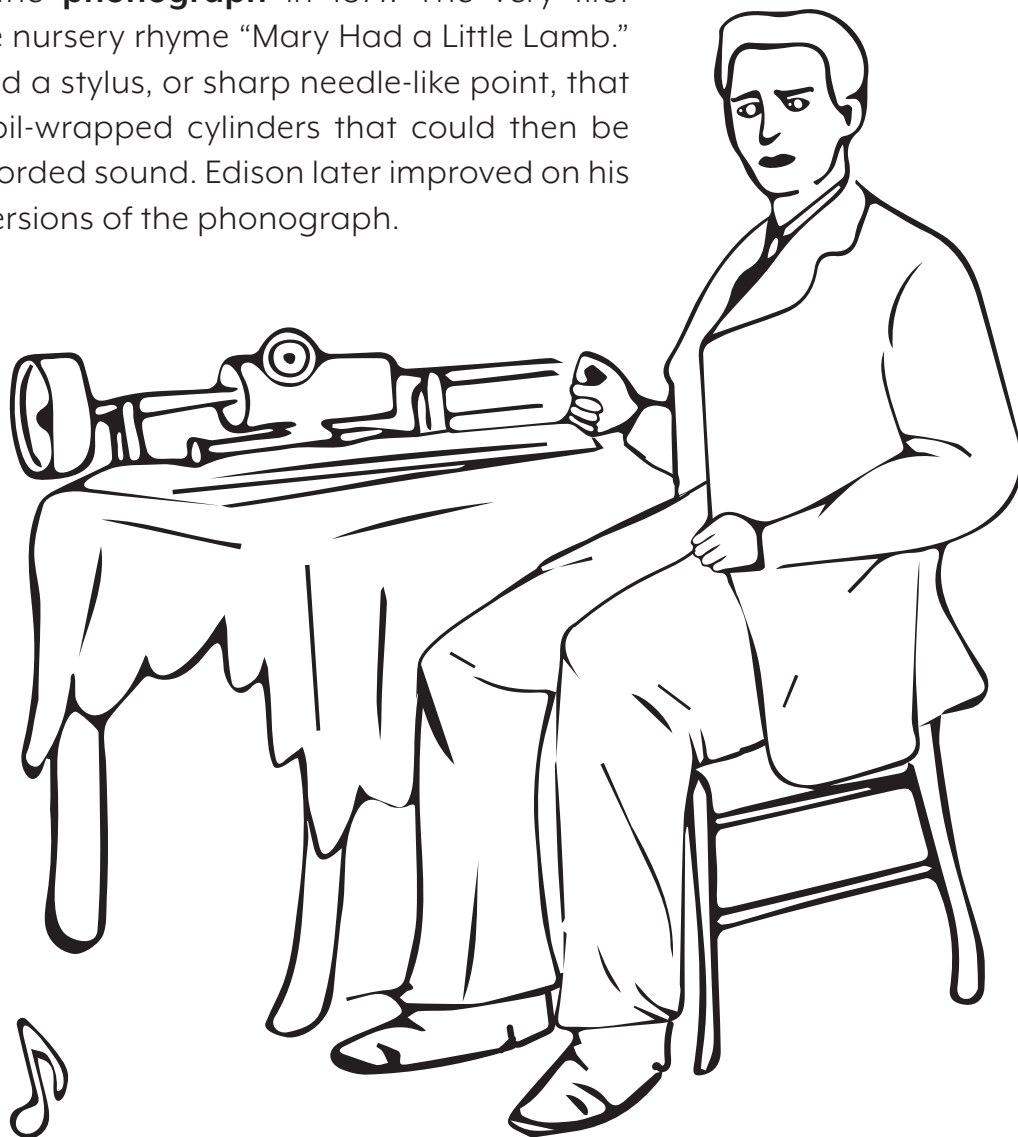
TO RECORD AND PLAY BACK SOUND



In the late 1800s, several inventors worked on machines that could record and play back sound. Let's explore some of these inventions!

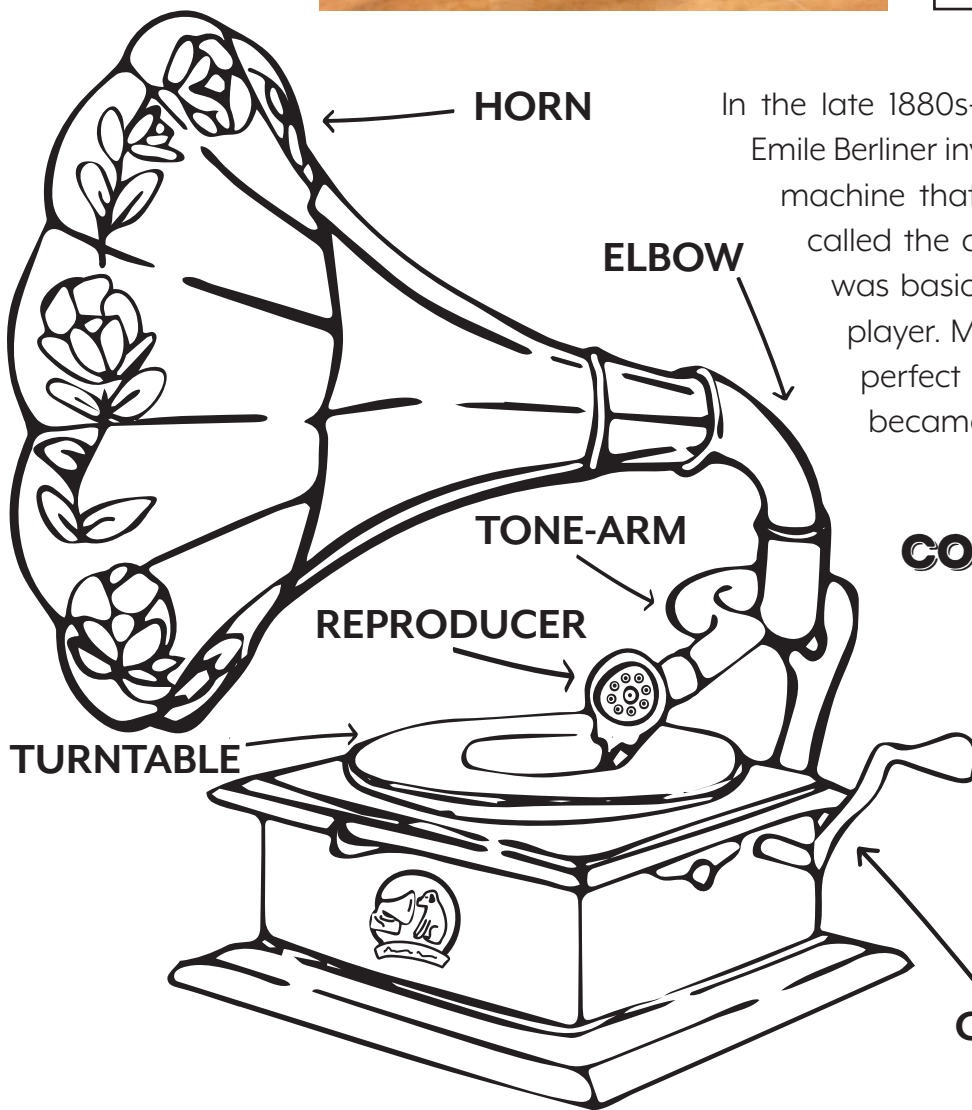
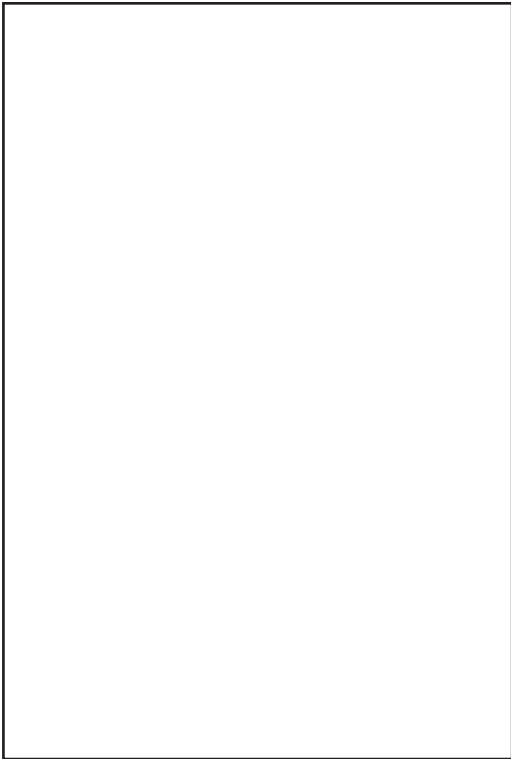
Thomas Edison invented the **phonograph** in 1877. The very first recording he made was the nursery rhyme "Mary Had a Little Lamb." The Edison phonograph had a stylus, or sharp needle-like point, that carved a groove onto tinfoil-wrapped cylinders that could then be played back to hear the recorded sound. Edison later improved on his design to create different versions of the phonograph.

COLOR EDISON AND HIS EARLY PHONOGRAPH!



Two later inventors – Chichester Bell and Charles Tainter – improved on Edison’s design with their **graphophone**, which recorded on wax cylinders, a sturdier material. With the introduction of wax cylinders, companies started producing and selling recordings of music. Each cylinder held one song.

Look at the picture of the cardboard cases used to hold musical wax cylinders – each case had graphics and text related to the company that produced it. Now design your own case in the blank square.



In the late 1880s-early 1890s, German immigrant Emile Berliner invented a recording and playback machine that used discs instead of cylinders called the disc **gramophone**. This machine was basically the early version of a record player. Machinist Eldridge Johnson helped perfect this design, and his later version became known as the **Victrola**.

COLOR THE VICTROLA!

DID YOU KNOW?

THE GRAMMY AWARDS FOR MUSICAL EXCELLENCE ARE NAMED AFTER BERLINER'S GRAMOPHONE.