

Waiting to Exhale Forrest Bird

A USPTO Inventor Card Activity Challenge: Make Your Own Lung Model

Background

Medical Respirator Inventor

Born: 6-9-1921 in Stoughton, Massachusetts

Forrest M. Bird is the inventor of the first convenient and reliable, low cost, mass-produced medical respirator, referred to as a medical ventilator in Bird's U.S. Patent No. 3,842,828. Bird also helped reduce infant mortality rates in babies with respiratory issues with his invention dubbed the "Babybird Respirator" whose technology traces back to U.S. Patent No. 3,191,596.

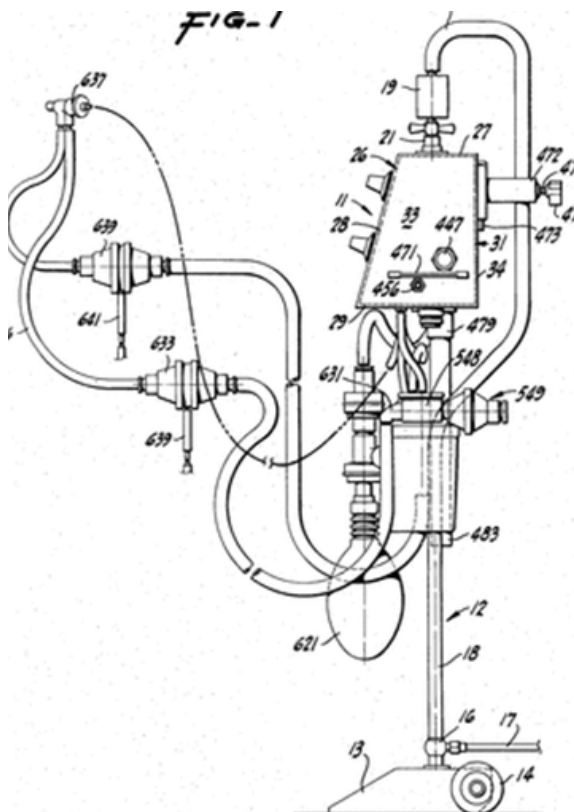
Activity Challenge

In order to design his medical respirator, Forrest Bird needed to understand how the lungs and respiration work in our bodies. How might he have built a model to replicate respiration?

Your challenge today is to use recyclable materials such as plastic water bottles, trash bags, straws, tape, or balloons to construct a model of a lung. You will want to make sure that the diaphragm is a part of your model. Use at least three different materials to build your lung model. Be sure to brainstorm designs, sketch prototype, build prototype, test and iterate as needed. Good luck!

For Added Enrichment: <https://www.youtube.com/watch?v=HKEmtaWBcQQ>

A patent gives the inventor the right to exclude others from making, using, selling and offering to sell the invention for a limited period of time. After the patent expires, society benefits by using and improving the invention. Think of all the ways breathing devices have changed since Forrest Bird's first model was made. What will you invent?



Forrest Bird Patent No. 3,842,828 Respirator