Beginners guide to Airlocks

An airlock is a device that keeps outside, contaminated air from entering the airspace within the demijohn, carboy, or fermentation bucket. This prevents undesirable bacteria and mould from contaminating the wort during the fermentation and aging process. An airlock prevents allows the generated carbon dioxide produced during fermentation to escape without letting air in which could cause contamination. It does this by forcing the gases to pass through a small chamber of water, release the gas as a bubble.

What are the different kinds of airlock and how do they differ?
There are two basic types of airlock meant for home brewing; Bubbler type and three-piece type. They are basically the same as far as the working principle goes; both have a chamber in which fresh water is placed, and both make the use of gravity to keep the water in its chamber while allowing excess pressure to be released through the water.

The Bubbler type airlock is a tube which has an s-curve and chamber, in which water is placed. Gravity keeps the water inside the chamber, out of the wort, and allows the pressure to escape from bubbling through the water chamber.

The Three Piece airlock like the name implies, is made up of three parts: the main chamber, the floating bubbler, and the cap. The main cylinder and chamber has a tube through the centre with the liquid chamber surrounding it. This chamber is filled with water and the floating bubbler is placed upon the tube top, where it rests. When pressure builds up within the fermenter, the gas travels up through the tube. When the bubbler is full, the pressure escapes under and around the bottom edge of the floating bubbler and passes through the water, allowing no outside air into the fermentation airspace.