

Development of the Gas Mask

A [gas mask](#) is a mask put on over the face to protect the wearer from inhaling "airborne pollutants" and toxic gases. The gas mask forms a sealed cover over the nose and mouth, but may also cover the eyes and other vulnerable soft tissues of the face. Some [gas masks](#) are also respirators, though the word gas mask is often used to refer to military equipment (e.g. Field Protective Mask, etc.) (The user of the gas mask is not protected from gas that the skin can absorb.)

The gas mask is an object recognized all around the world by many people. To some, it signifies war; to others, it is a piece of work equipment. What was the mask initially meant for, though? The mask has a centuries-old origin, and through the years it has evolved dramatically.

Origin

1. In 1799, a primitive form of the gas mask was being used by miners in Prussia. This invention is credited to Alexander von Humboldt. The device he created was essentially a cloth saturated in chemicals and tied to the face. The cloth filtered out dust and other inhalants the miners were subject to. There is no specific inventor of the gas mask, but various patents for gas mask devices started appearing in 1887.

Gas Masks in the United States

2. In 1849, the inventor Lewis Haslett was issued patent #6529. This patented device strained the air and separated smoke and various other harmful particles so the wearer could breathe cleaner air. Minor developments were made by different inventors and the gas mask continued to change throughout the years.

Further Development

3. In 1866, cotton fibers were used to make the air even cleaner. During that same year, the mixture of charcoal and quick lime were added to the gas mask. This combination was used to filter out poisonous gases as well as smoke and particles. In this model, there was also a compartment that removed carbon dioxide from the exhaled air so it would not be inhaled. Leading up to World War I, different variations of this mask were made all over the world.

World War I

4. During World War I, different countries each developed different masks, but they all essentially served the same purpose. The English developed an uncomfortable helmet gas mask, but it could not be worn for long periods of time. This mask protected the wearer against chlorine and various acids. The French developed a mask that incorporated goggles and protected against tear gas. The initial American mask was made in 1917, but it had mechanical failures and was only used in training. Then in October 1919, a [gas mask](#) was developed that protected against every type of gas as well as certain kinds of smoke. But the Germans developed the most efficient gas mask in 1916. It was made of leather and had unbreakable eyepieces. The leather made it fit tight to the wearer and it was able to be worn for long periods of time. It protected against tear gas, chlorine and all types of smoke.

Modern Gas Masks

5. Modern gas masks are constantly changing along with the different chemicals that are being used in warfare. Gas masks are also used by firefighters, miners and for other jobs where people breathe unclean air or are exposed to toxic agents (like in a laboratory). The chemicals used in gas masks vary depending on what the wearer is using it for (for example, a soldier in Afghanistan will use a different type of mask than a miner in West Virginia).