

Deadly Gas In The Mines

1. Explosions and Horrible Smells

Coal underground can contain gasses. These are very dangerous. The miners called these gasses 'damps'. Sometimes gas called 'firedamp' can explode if set on fire by a flame. Firedamp is the same as the gas we have in our houses for cooking and heating, but if it leaks out into the air it is very dangerous and can cause terrible explosions.

If there is an unplanned explosion underground, or a fire, the air which remains after the explosion can contain a very poisonous gas which the miners call 'whitedamp'.

Sometimes the air underground could run out of the oxygen we need to breath. Such air was called by the miners 'blackdamp'. Another gas was called 'stinkdamp' because it smelt so horrible. It too was very poisonous but because of its smell it was not that dangerous – the miners could smell that it was there and leave the mine before it harmed them.

The miners used special lamps to detect firedamp. They also took pets, usually birds or mice, with them underground to detect poisonous or unbreathable gasses.

If blackdamp was present in the mines the miners could use special things to breathe with (called 'respirators'). Modern miners always carry one of these attached to their belt. These contained something which removed the dangerous gas from the air. Very similar things are used by

astronauts in their spaceships and in their spacesuits to keep their air breathable.



A special lamp called a safety lamp which the miners used both for lighting and for detecting dangerous gasses.

Before they had such things to help them breath it was important to keep fresh air flowing through the mines. This was to blow away any gas and to keep the air breathed by the people who worked in the mines as clean and fresh as possible. This was done by having little doors to make the air go through all the tunnels. The doors were called traps and long ago it was the job of the youngest children working in the mines to open and close these traps to let people and 'tubs' (small trucks) through. It was an important job, but very dull and boring. These children were called 'trappers' by the older miners, because they worked the trap doors and because they trapped the dangerous gasses.