

# Miners' Safety Lamps

## Source A:

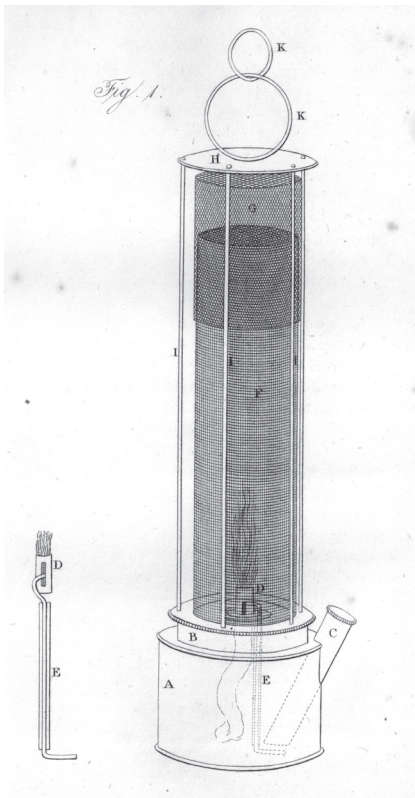
An extract on miner's safety lamps from a tract (short piece of writing) on mining by Joshua Richardson, 1848 p. 38

A lamp known among miners as the "Geordie Lamp," invented by Mr. George Stephenson, the distinguished Civil Engineer, was first tried in the Killingworth Main Colliery, on the 21st October, 1815 and "was carried in safely into a part of the mine where a string layer of inflammable air was issuing". On the 1st of January, 1816, a lamp invented by the celebrated chemist, Sir Humphry Davy, was first tried in the Hebburn Colliery, and also answered this purpose. This lamp is called "the Davy" and is more generally used than any other, "the Geordie" and others being modifications of both these lamps, are only partially used.

Source from: On the Prevention of Accidents in mines by Joshua Richardson 1848, p.38, in Tracts on Mining 19th Century Collection 622.09428 TRA5.

## Source B:

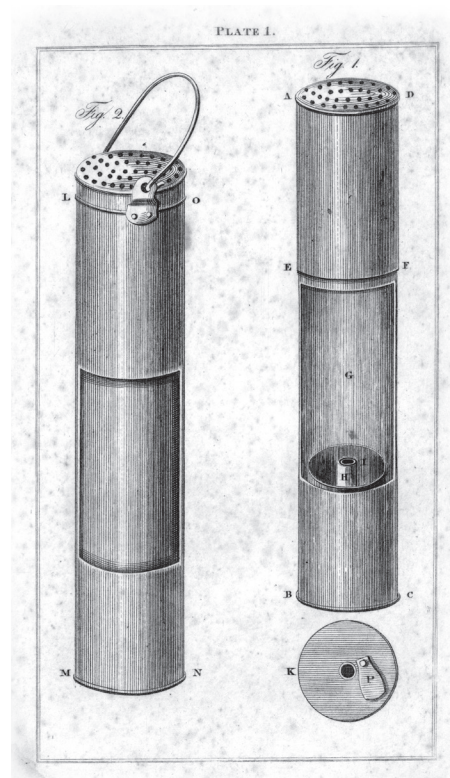
An illustration of Sir Humphrey Davy's safety lamp



Source Reference: Practical hints on the application of wire-gauze to lamps: for preventing explosions in coal mines, 1816, Rare Books, RB942.8 TYN (VI)2.

## Source C:

An Engraving of George Stephenson's safety lamp



Source Reference: Report upon the claims of Mr. George Stephenson, relative to the invention of his safety lamp, 1817 (Rare Books, RB622.47 REP).

Discover more resources online at:

<http://archivesalive.ncl.ac.uk>

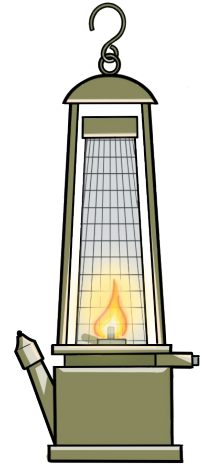
<https://historicengland.org.uk/services-skills/education>

## Source D:

### An extract about the Geordie Lamp and the Davy Lamp from a tract (short piece of writing) on mining by Joshua Richardson, 1848 p38-39

These two lamps were constructed on the discovered principle that flame will not pass through small apertures [holes] of ascertained dimensions. Mr Stephenson effected the object by insulating the light in an air tight glass cylinder and supplying the air for combustion through tubes of small diameter fixed in the bottom of the lamp, the used air escaping by similar tubes at the top of it. Sir H. Davy enclosed the flame of his lamp in a cylinder of wire gauze...

Source from: On the Prevention of Accidents in mines by Joshua Richardson, 1848, p.38-39, in Tracts on Mining 19th Century Collection 622.09428 TRA5.



# Questions

## Study Source A.

According to this source:

1. What name was the miner's safety lamp invented by George Stephenson known by?

---

2. What name was the miner's safety lamp invented by Sir Humphry Davy known by?

---

3. Which of these two lamps was most commonly used in the mines?

---

## Study Sources B, C and D.

According to these sources:

4. What did both the Davy lamp and Geordie lamp have in common?

---

5. What was the main difference between the Davy Lamp and the Geordie Lamp?

---

Discover more resources online at:

<http://archivesalive.ncl.ac.uk>

<https://historicengland.org.uk/services-skills/education>