

To Build a Better Mousetrap...: Knowledge, Innovation and Enterprise

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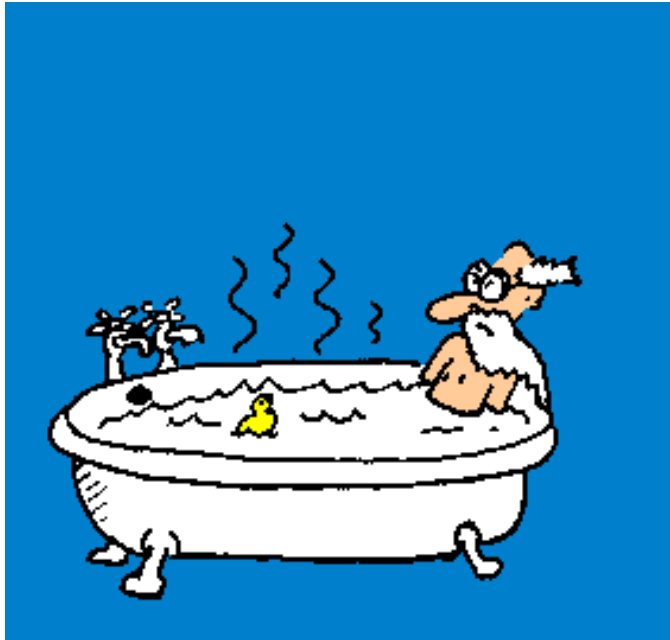
Build a Better Mousetrap

- If a man has good corn or wood, or boards, or pigs, to sell, or can make better chairs or knives, crucibles or church organs, than anybody else, you will find a broad hard-beaten road to his house, though it be in the woods.

Ralph Waldo Emerson

Knowledge

Eureka Moments



A Flash of Inspiration



Humphry Davy

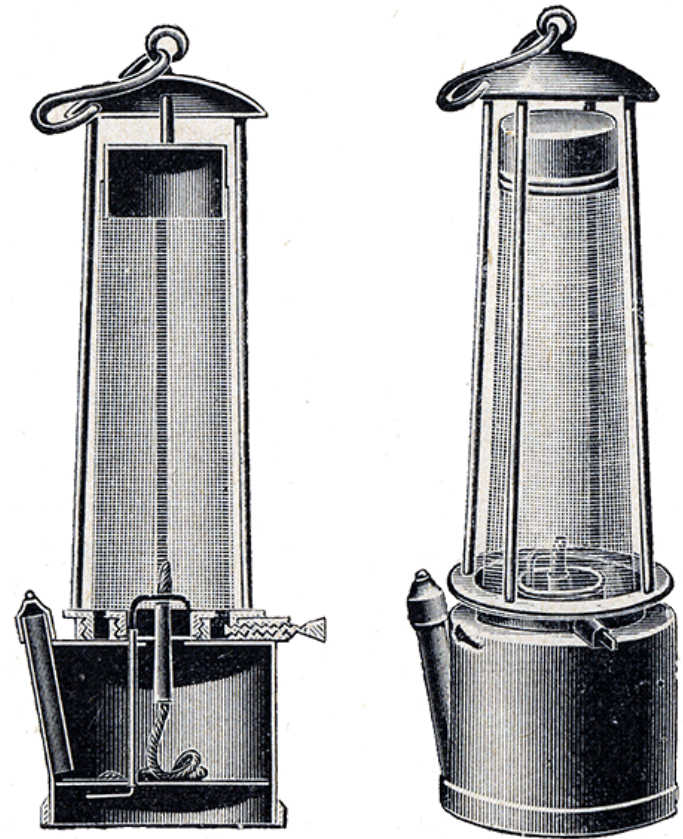
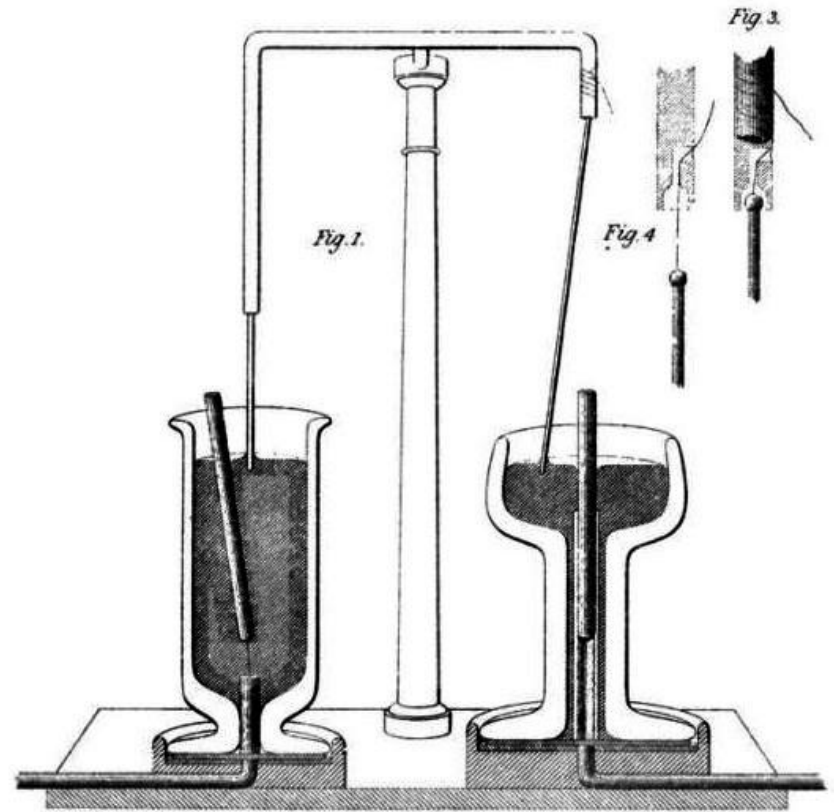
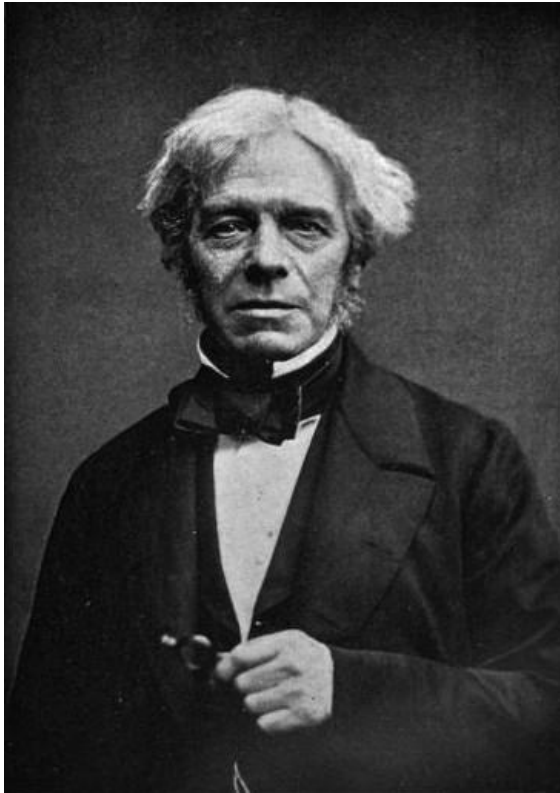


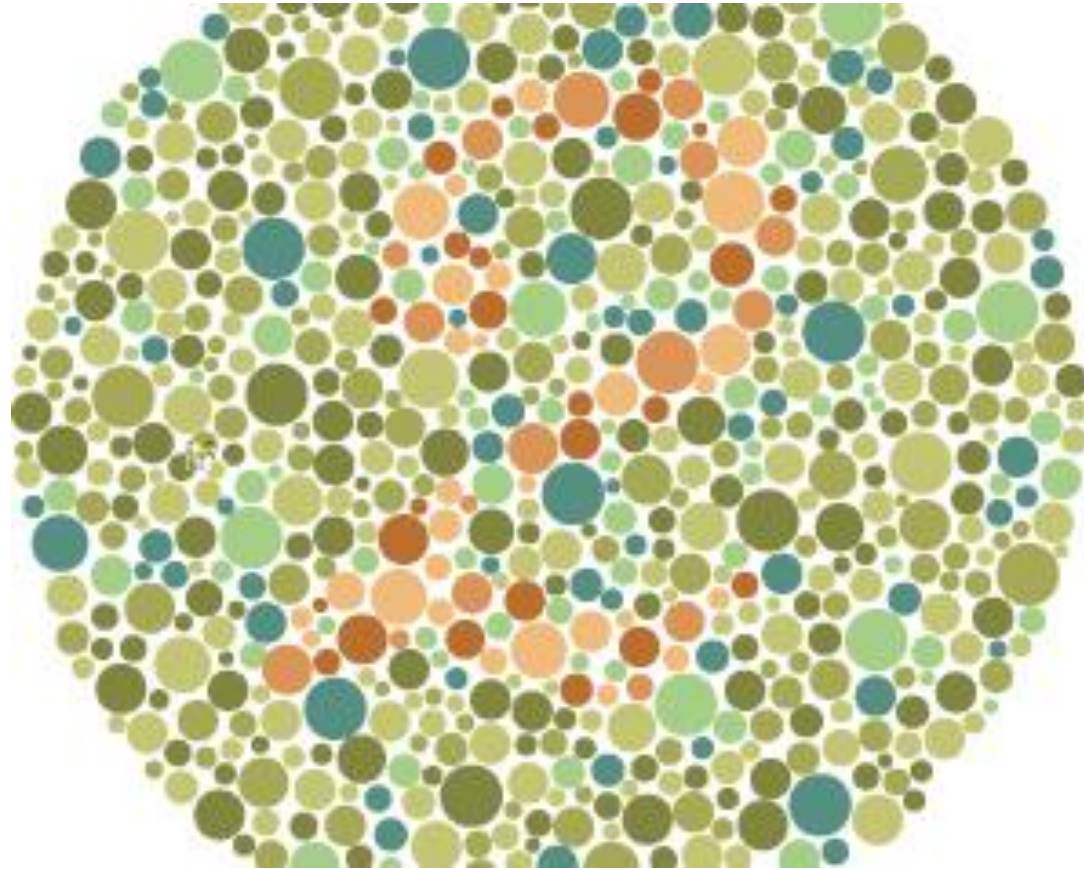
Fig. 192. Davy'sche Sicherheitslampe

Michael Faraday



Innovation and Knowledge

- Discovery is a process of designing a laboratory set up to create a new effect
- Davy designed an apparatus to isolate iodine
- Discovery is a process of refining theory to describe what is happening
- Faraday identified the oily substance in the apparatus as iodine



Ishihara Colour Vision Test

Innovation

Discovery

- Gravity
- Sodium
- Potassium

Science

High status

Invention

- Microscope
- Telescope
- Mousetrap

Engineering or Application

Low status

Enterprise

- Discovery
- Invention
- Commercialisation

Siege Cycles

- The first reports sounded in every respect extremely favourable.
- Before long it became clear that [these drugs] ... caused all kinds of unpleasant or detrimental side-effects.
- Finally most of them found a small limited special territory, in which the conscientious physician uses them.

Seige, M. "Klinische Erfahrungen mit Neuronal," Deutsche Medizinische Wochenschrift, 38 (****): 1828

Fashion or Real Innovation?

Conclusion

- Knowledge, Innovation and Enterprise stand in a complex relationship with each other.