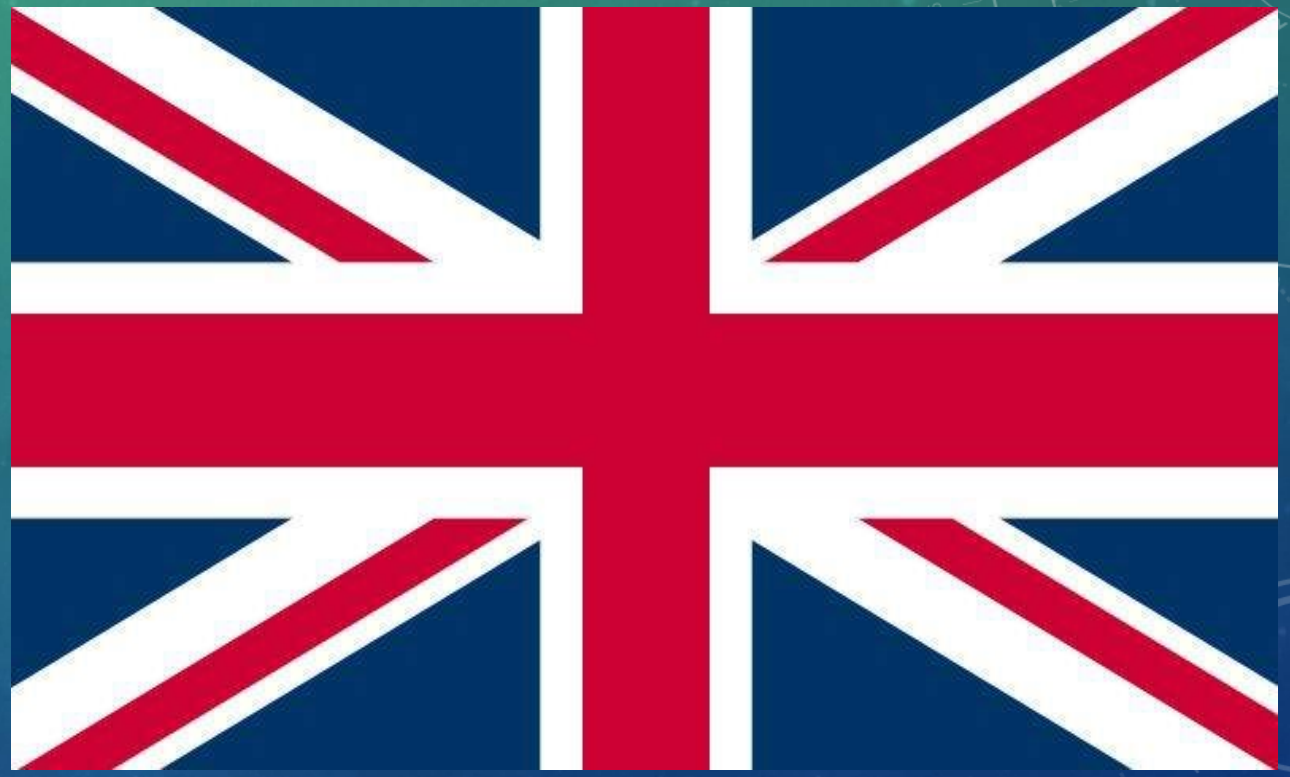
BRITISH INFLUENCE IN THE GLOBAL DEVELOPMENT OF SCIENCE

km
0
50
100
1400
1000
800
600
400
200
50
0
m
Atlantic
Ocean
Northsea
Scotland
Northern Ireland
IRELAND
DUBLIN
Irish Sea
England
Wales
LONDON
Celtic Sea
English Channel
FRANCE



- to poke out – виглядати, висовуватись;
- virtually [ˈvɜːtʃʊəlɪ] – фактично, практично;
- human endeavor [ɪnˈdɛvə] – людська діяльність;
- motion – рух;
- gravity [ˈgrævɪtɪ] – сила тяжіння;
- DNA – ДНК;
- application [plɪˈkeɪʃ(ə)n] – програми;
- persued by people – проведені людьми, «переслідувані» людьми;
- controversial [kɒntrəˈvɜːʃ(ə)l] – спірний, дискусійний;
- regard to – щодо, відноситись до;
- to lay the foundation - закладати фундамент;
- force – сила;
- the forces acting upon[əˈpɒn] - сили, що діють на ;
- influential [ɪnflʊˈɛnʃ(ə)l] – впливовий;

in response to – у відповідь ;

polymath [ˈpɒlɪmæɒ] – ерудит;

via [ˈvaɪə] – через;

immense [ɪˈmɛns] – величезний, колосальний;

cargo [ˈkɑːgəʊ] – вантаж;

vicinity [vɪˈsɪnɪtɪ] – навколишній район, прилеглий район;

directly [d(a)ɪˈrɛktlɪ] – відразу, негайно;

simultaneously [sɪm(ə)lˈteɪnɪəslɪ] – оддночасно, синхронно;

audible [ˈɔːdɪb(ə)l] – звуковий;

the incandescent light bulb – лампа розжарювання;

relativity [rɛləˈtɪvɪtɪ] - теорія відносності;

equation [ɪˈkweɪʒ(ə)n] – рівняння;

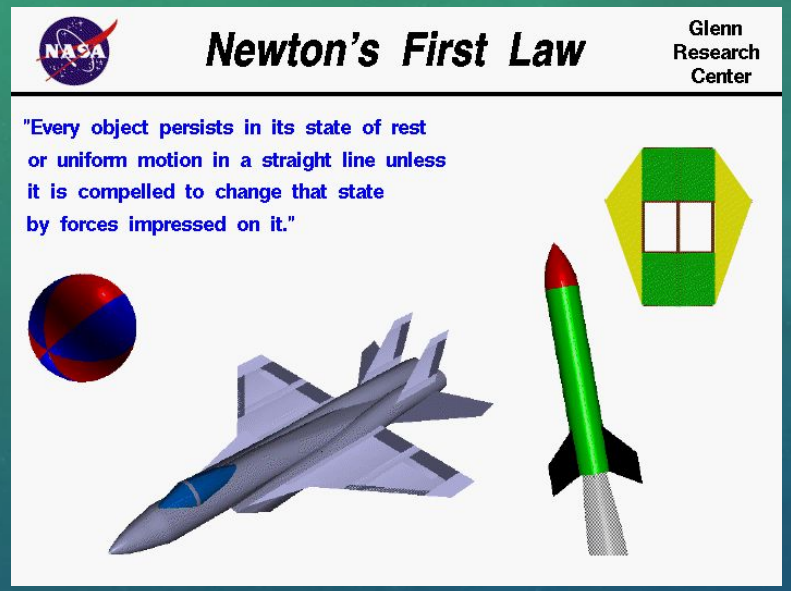
subsequent [ˈsʌbsɪkwənt] – наступний, подальший;

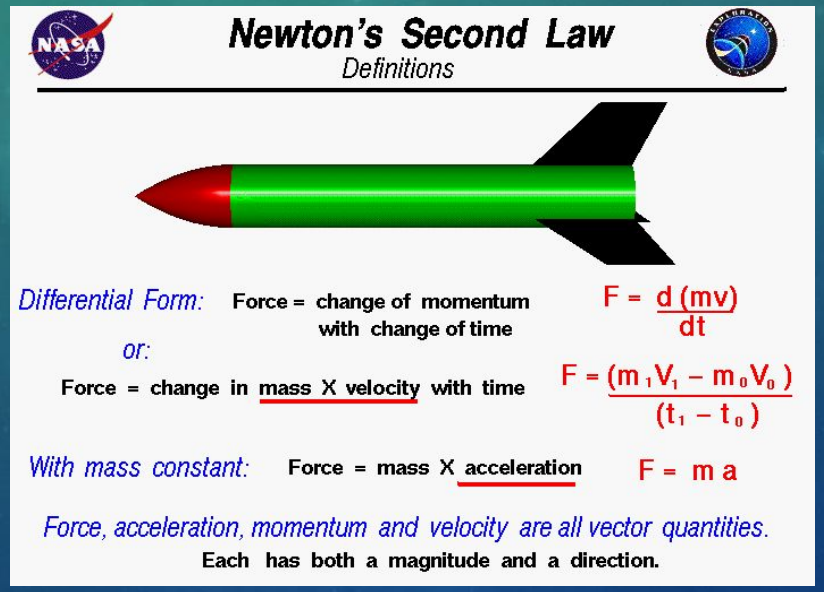
breakthrough [ˈbreɪkθruː] – прорив;

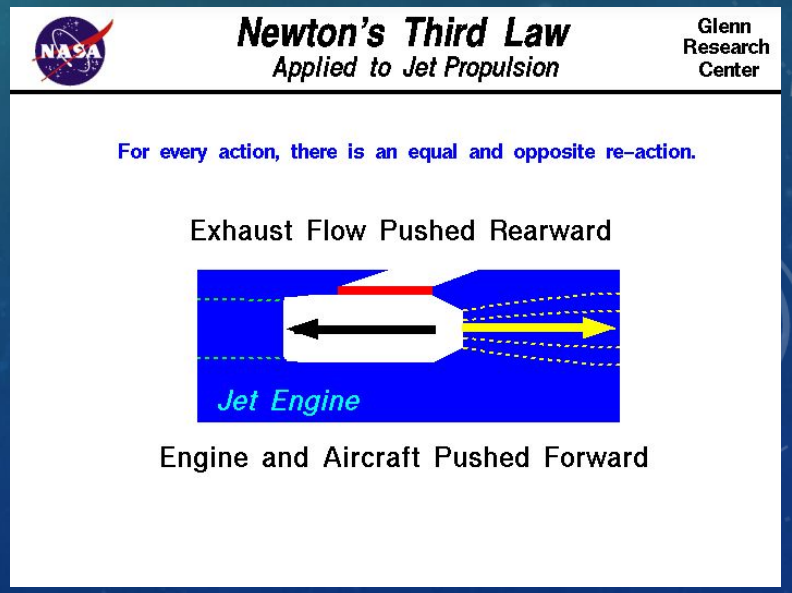
citation [saɪˈteɪʃ(ə)n] – цитування, посилання (на автора);

7 British Inventions

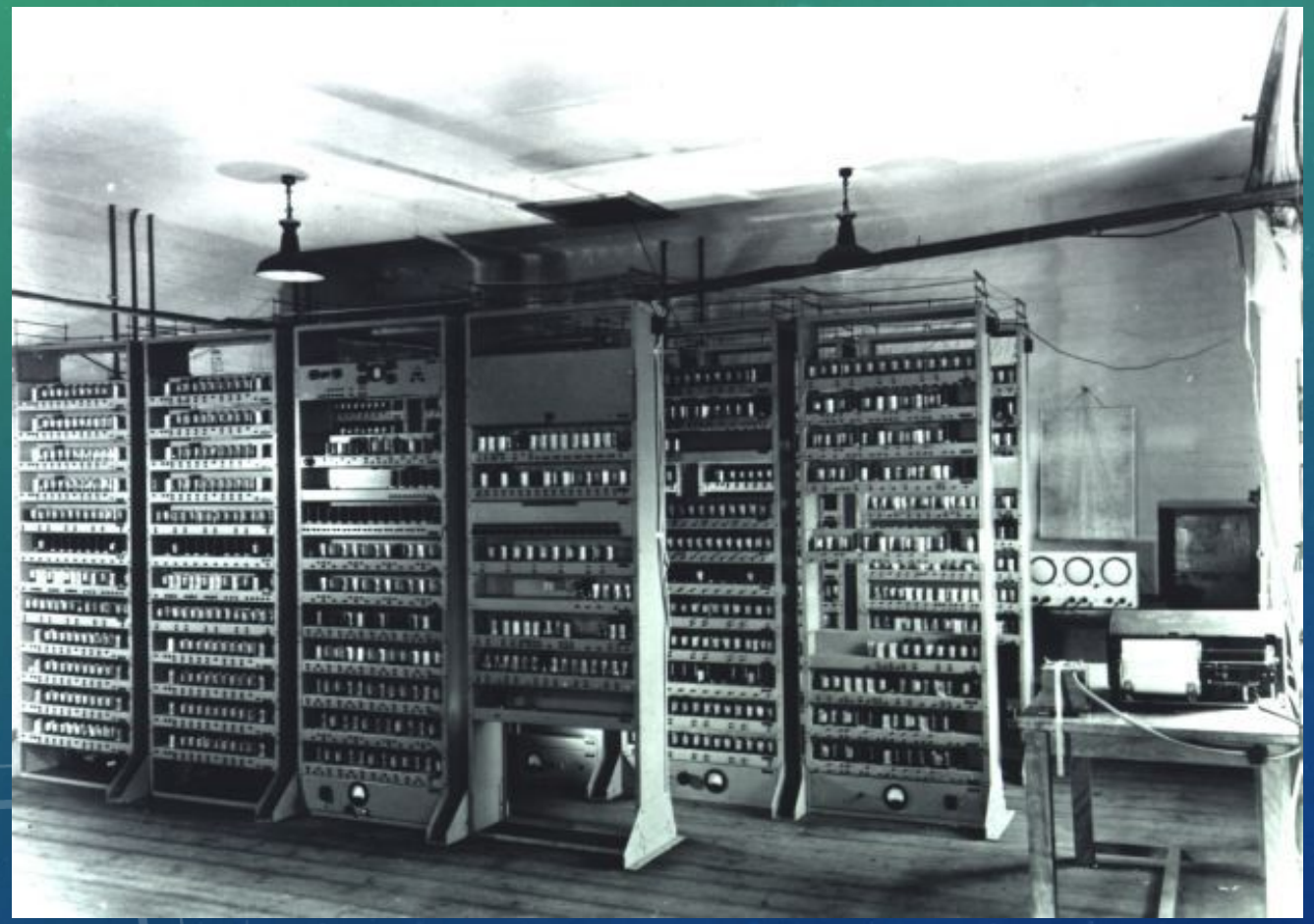
NEWTON'S LAWS

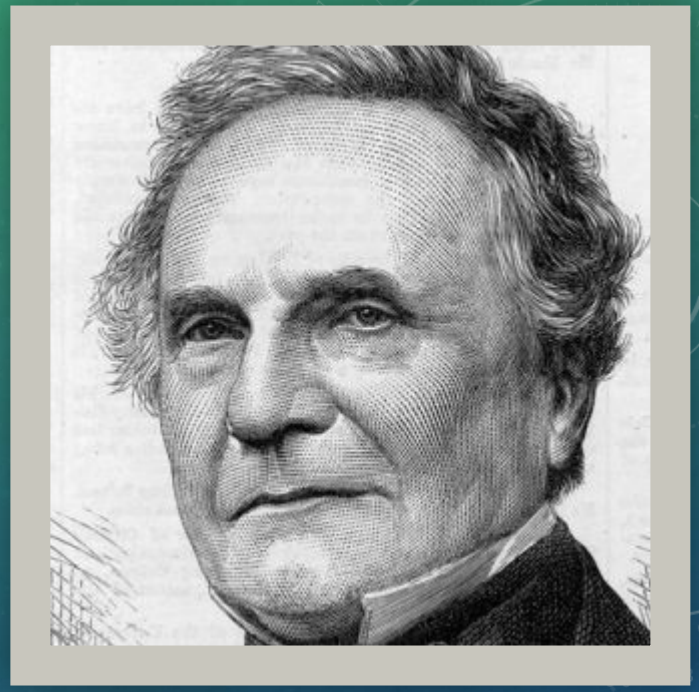


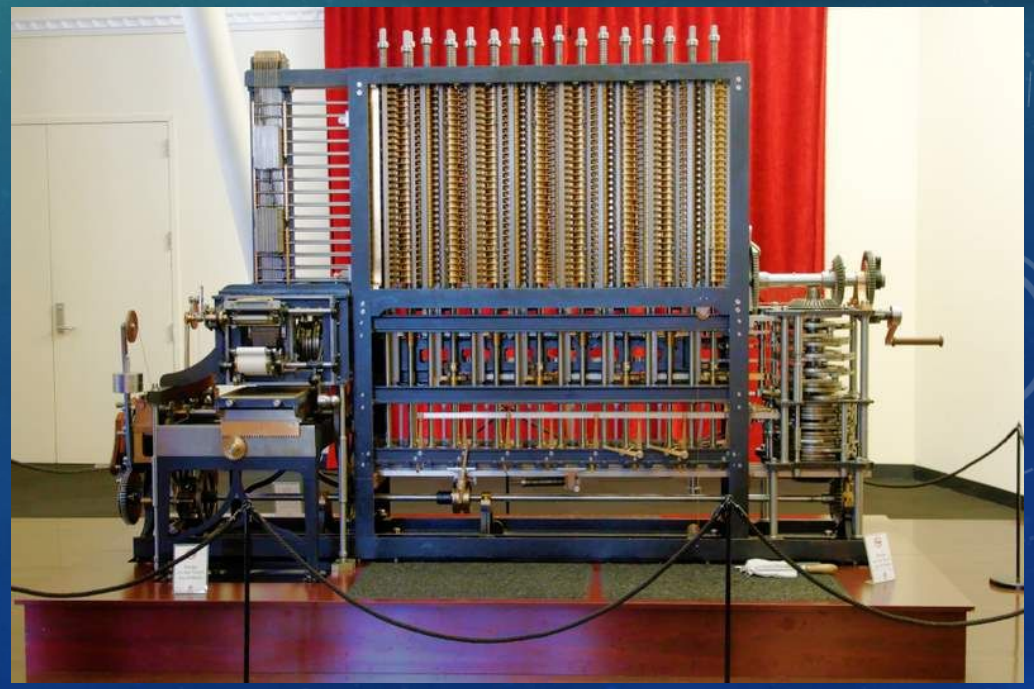




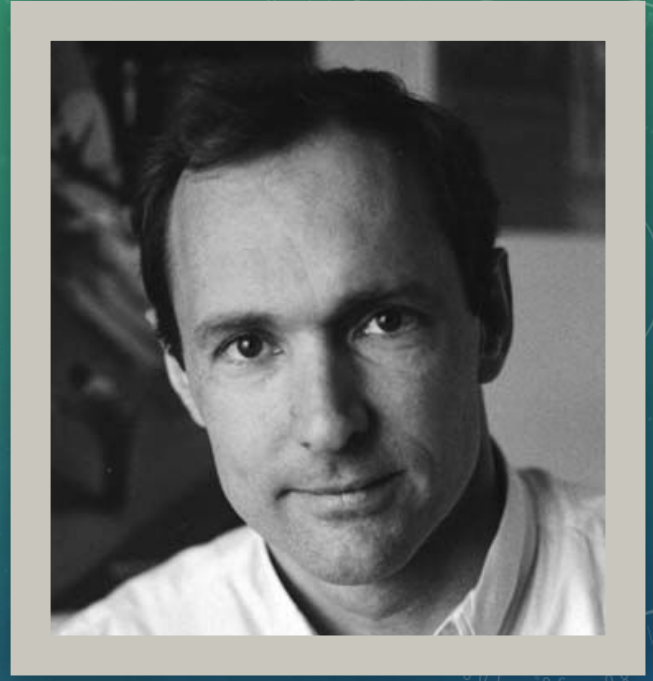
PROGRAMMABLE COMPUTER

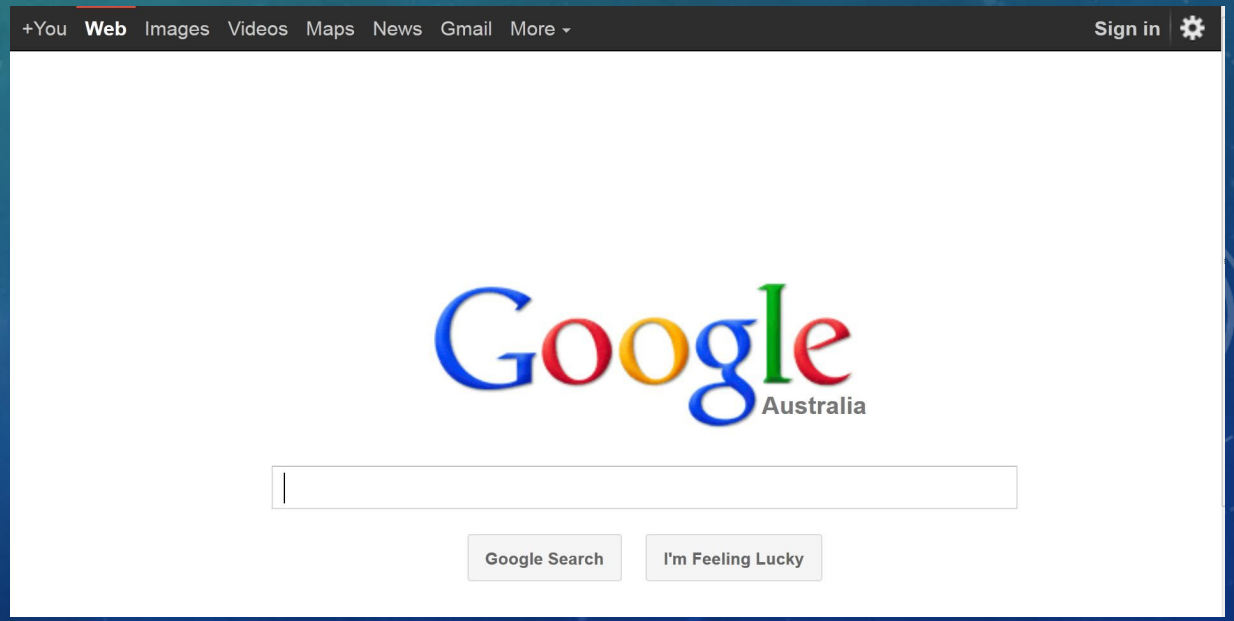




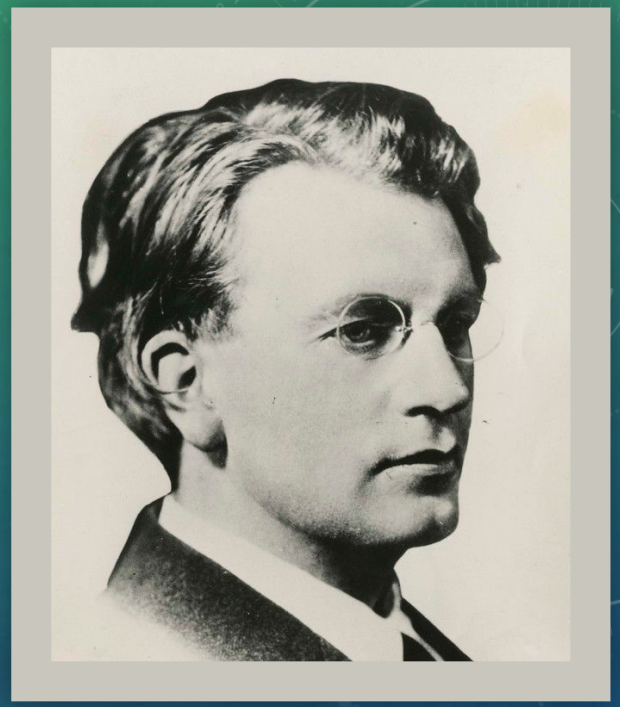


WORLD WIDE WEB

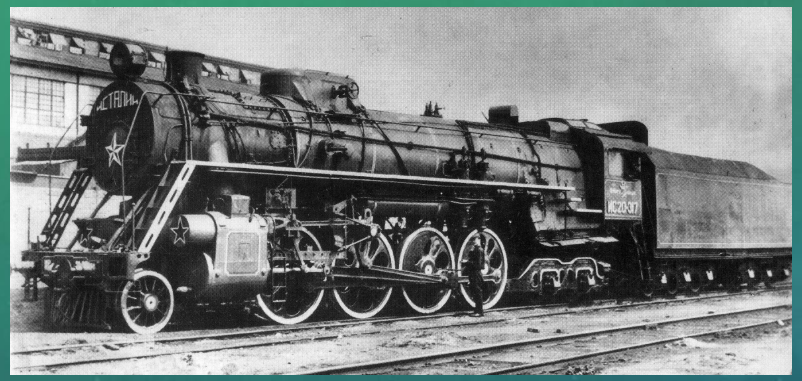


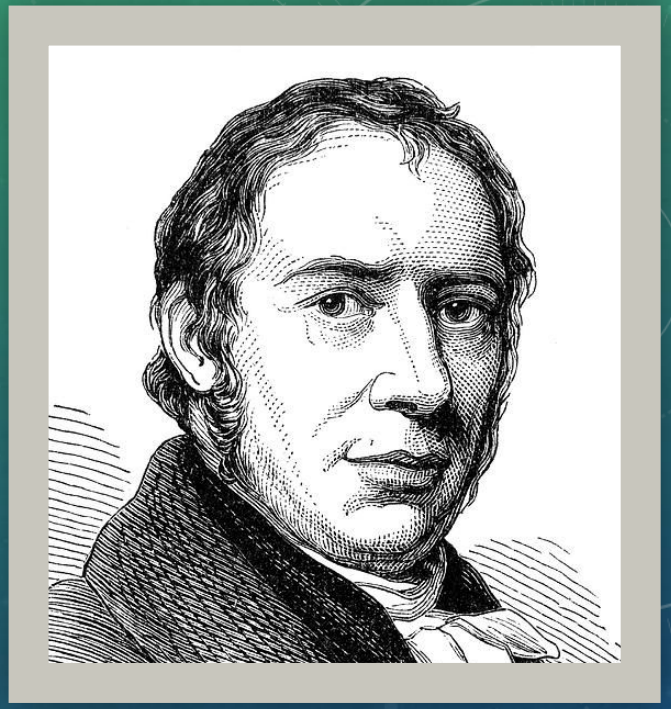


TELEVISION

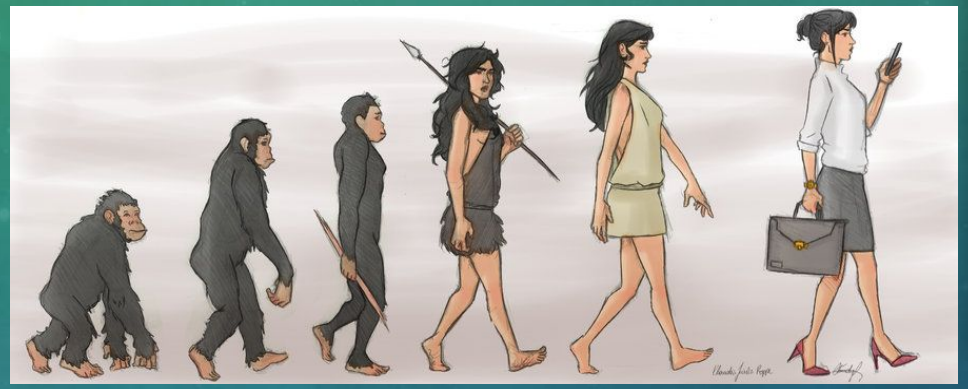


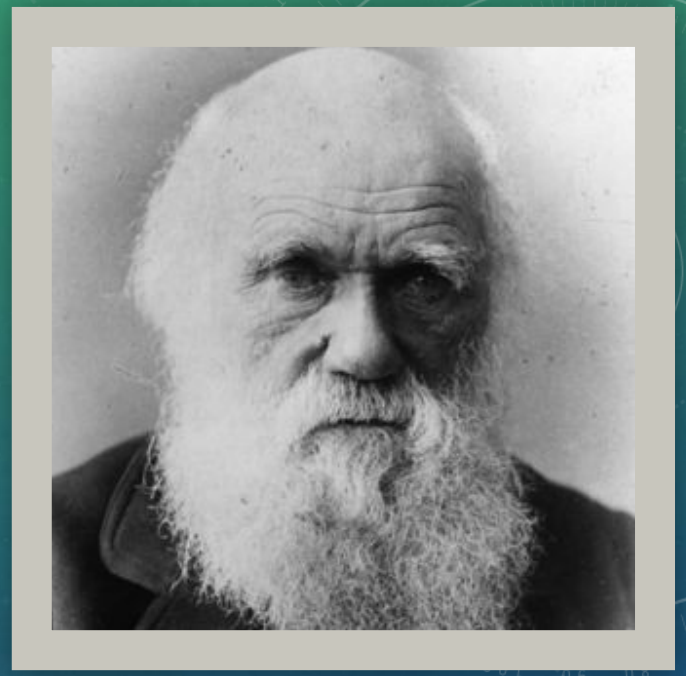
STEAM LOCOMOTIVE

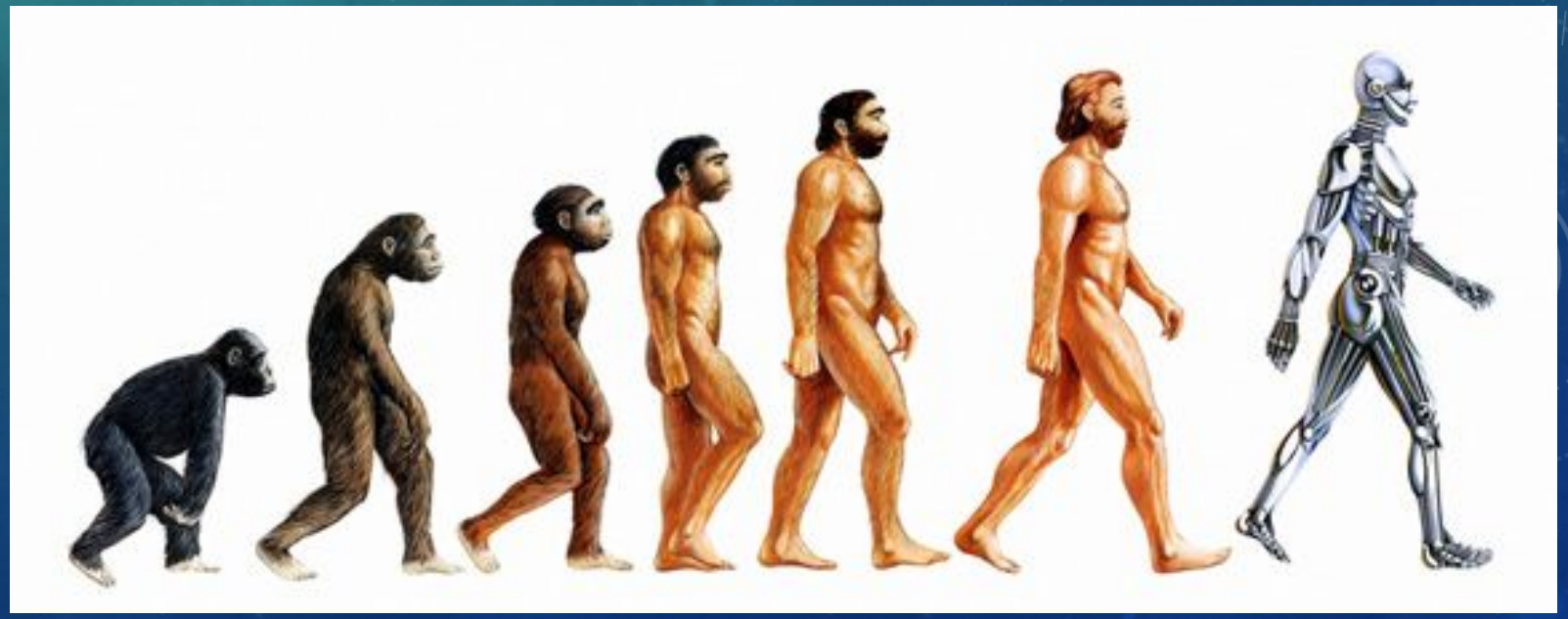




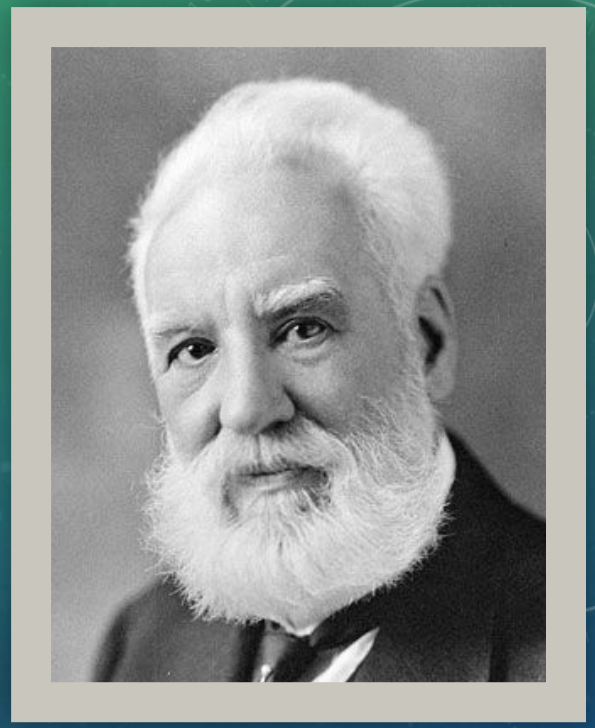
THEORY OF EVOLUTION







TELEPHONE

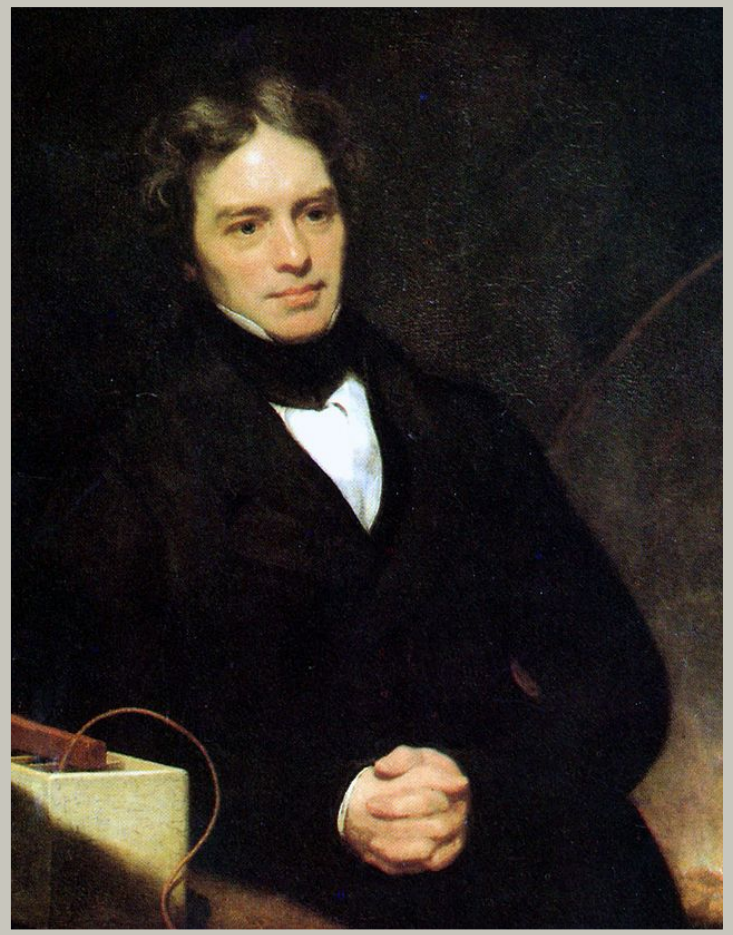


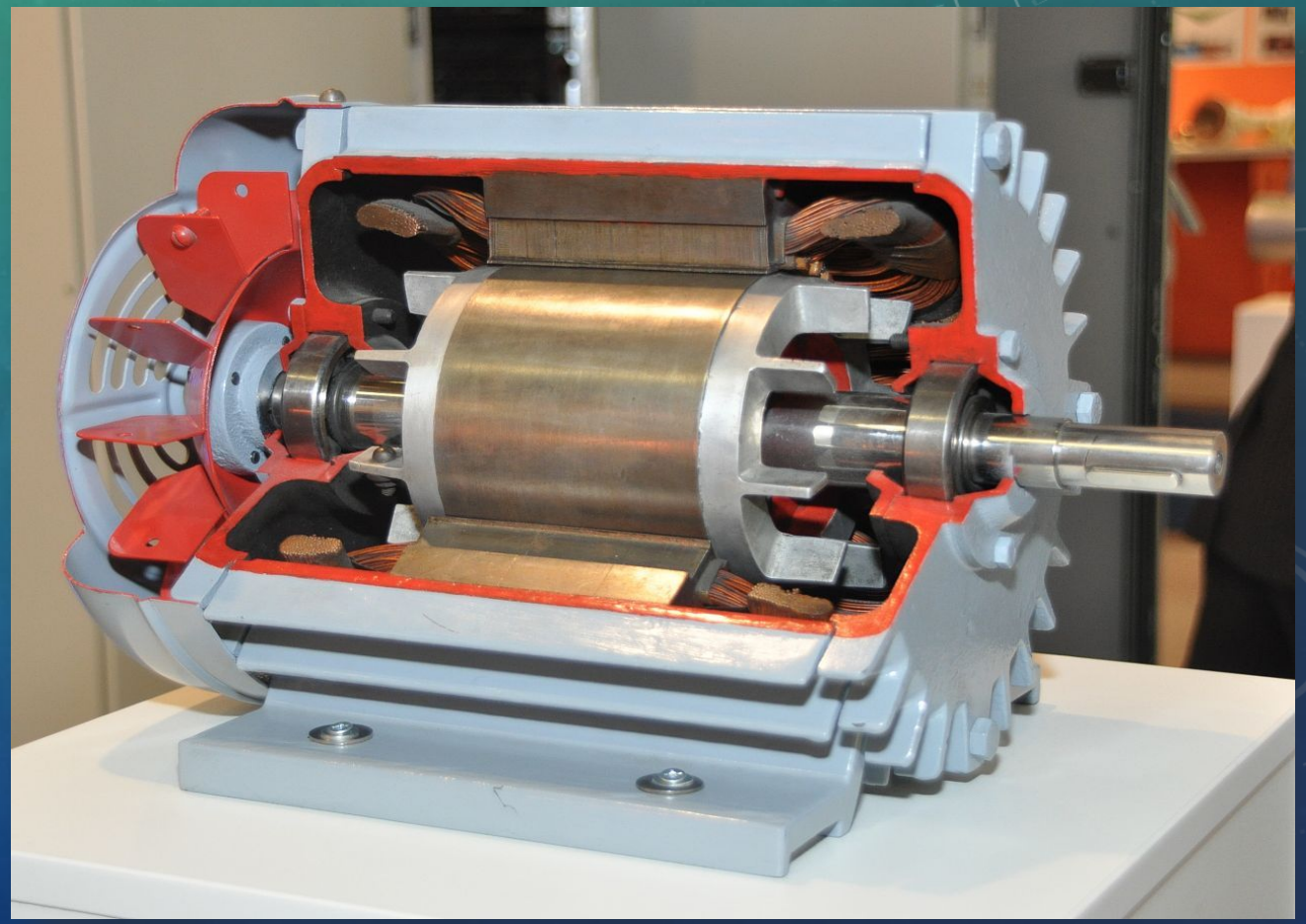
IMPORTANT ADVANCES MADE BY PEOPLE FROM THE UK

- *There are many others major theories, discoveries and applications advanced by scientists from the Great Britain.*

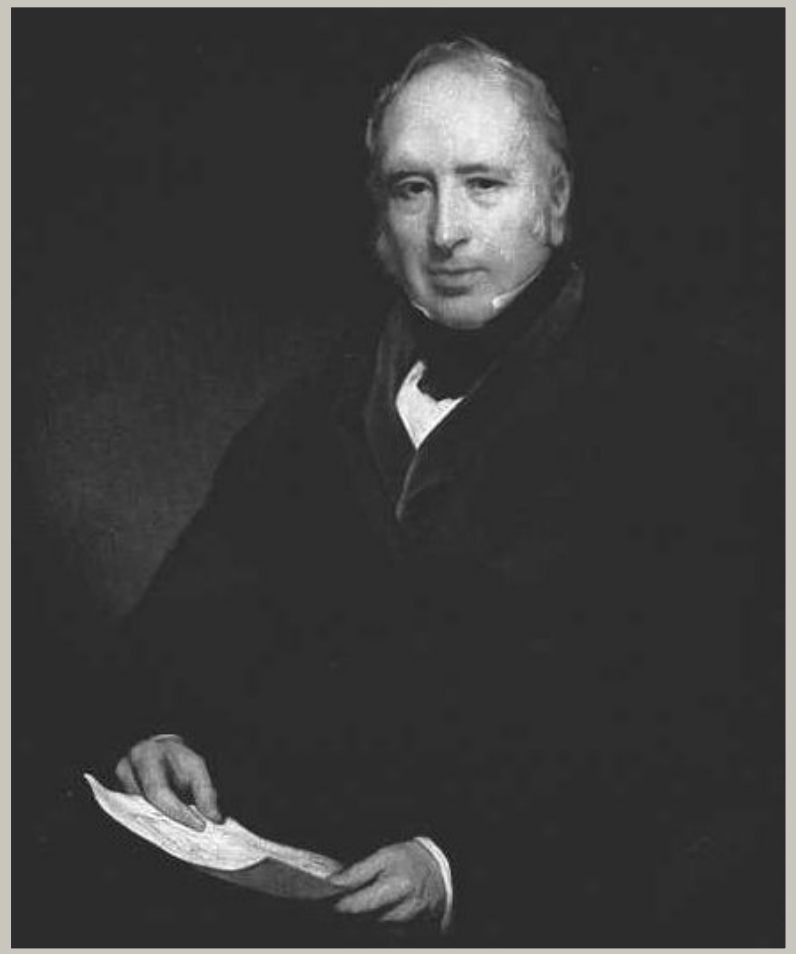
The discovery of hydrogen, by **Henry Cavendish (1731– 1810).**

*The electric motor, by **Michael Faraday (1771– 1867)**, who largely made electricity viable for use in technology.*

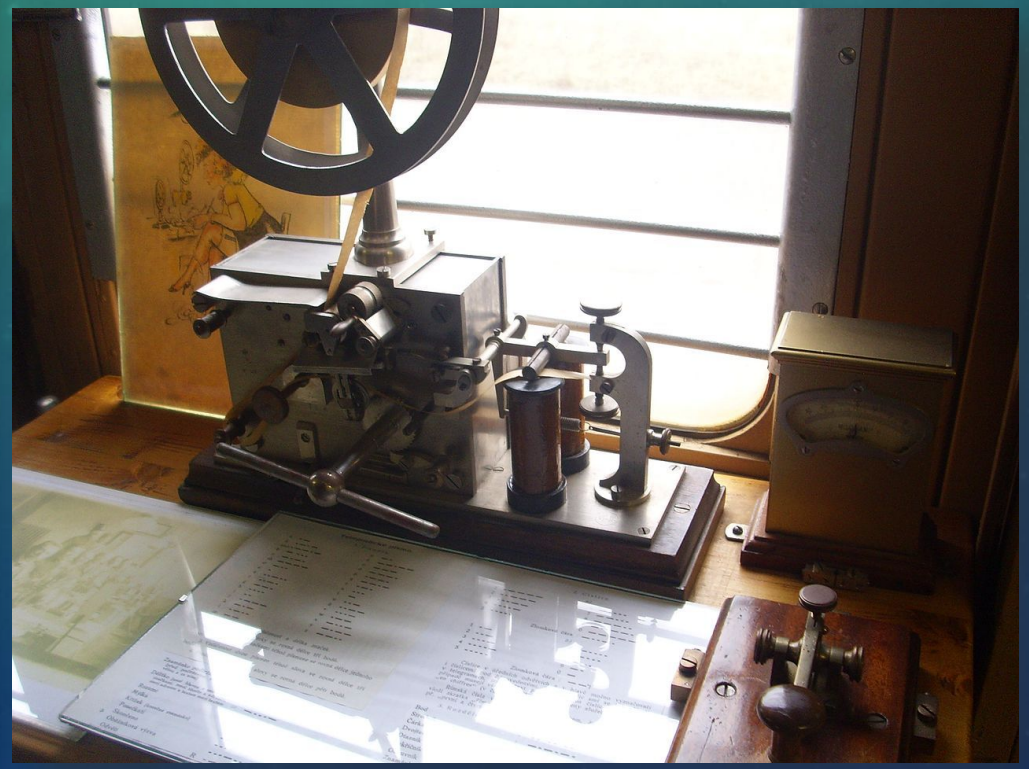




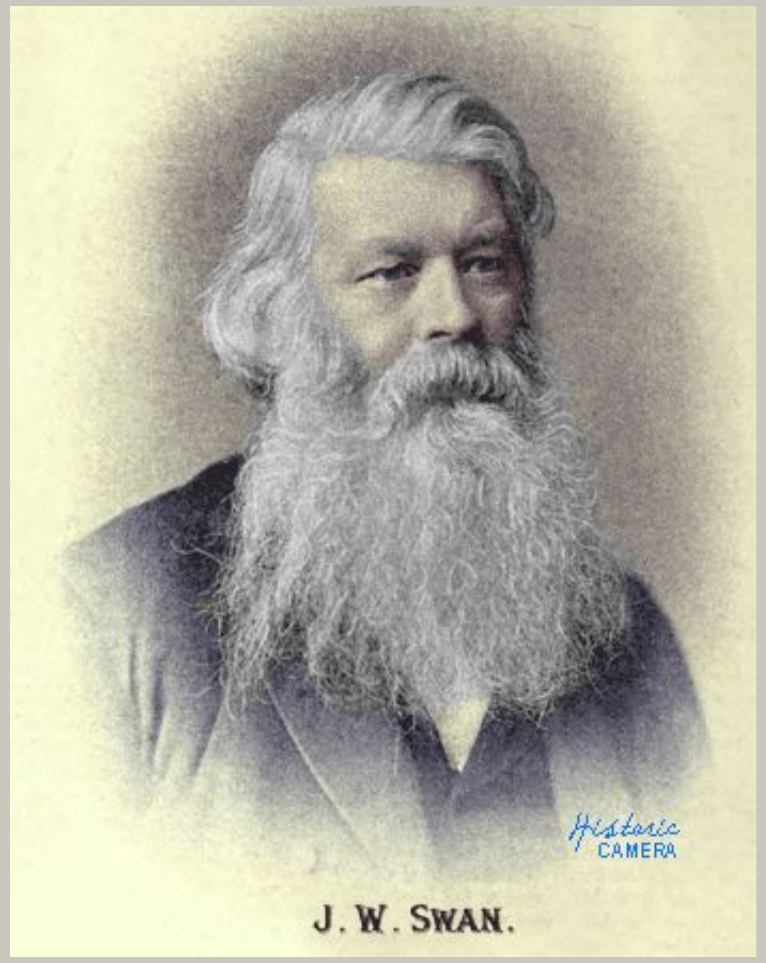
*The theory of aerodynamics, by **Sir George Cayley (1773– 1857)**.*



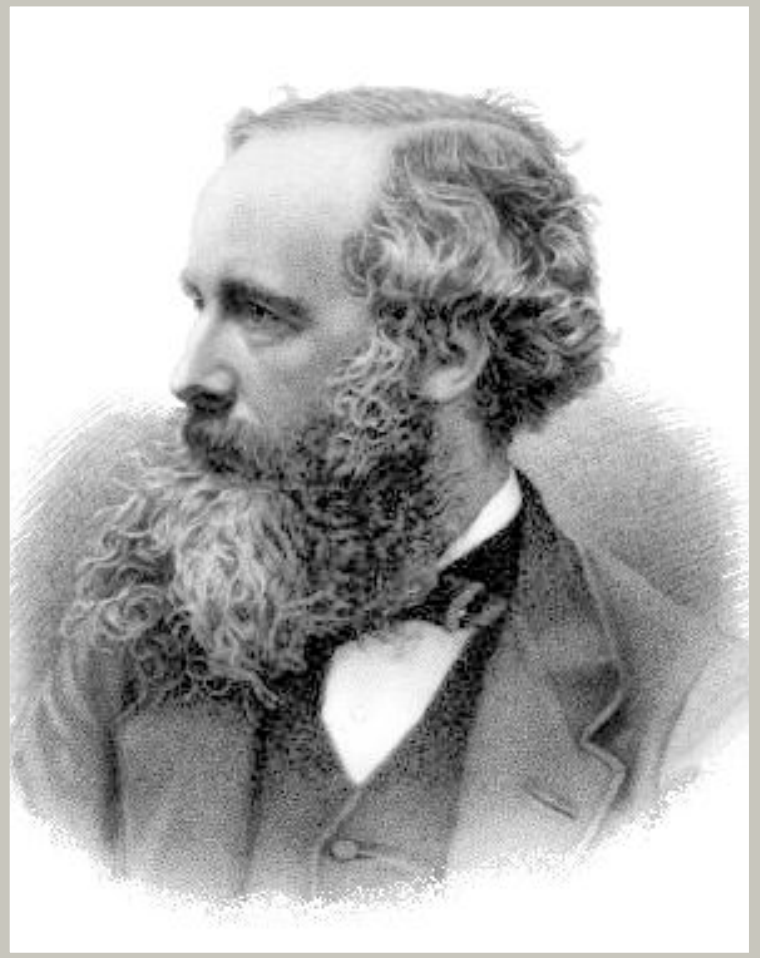
The first commercial electrical telegraph, co-invented by ***Sir William Fothergill Cooke (1806–79)*** *and* ***Charles Wheatstone (1802–75).***



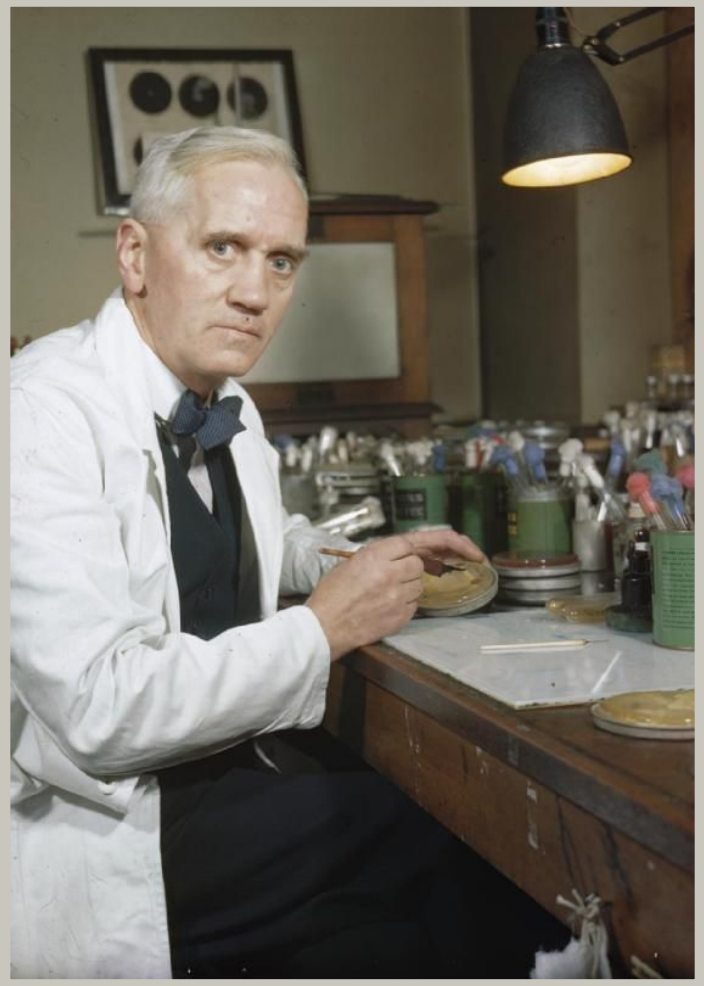
*The invention of the incandescent light bulb, by **Joseph Swan (1826– 1914).***



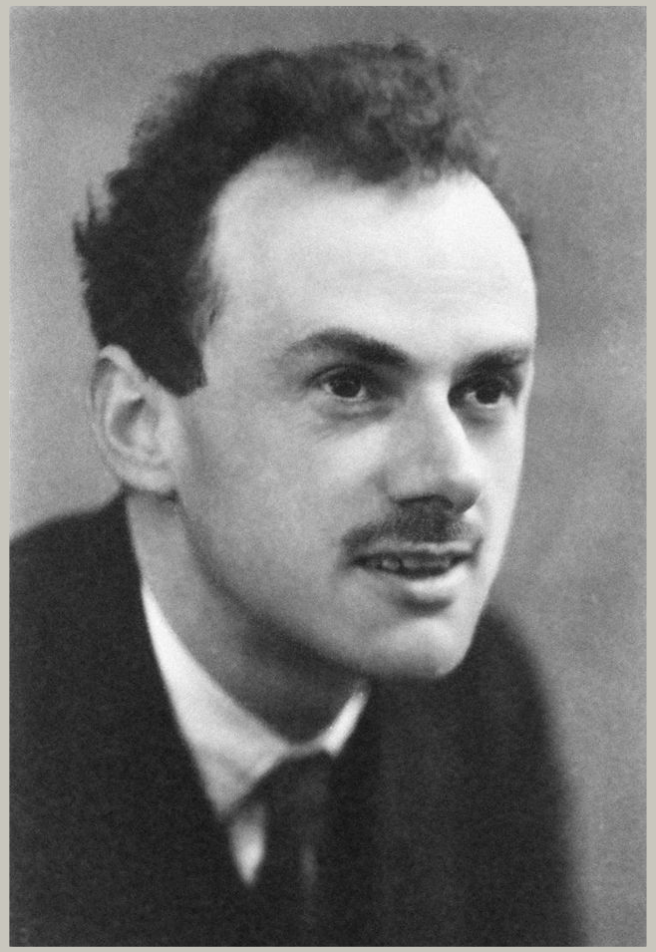
The unification of electromagnetism, by ***James Clerk Maxwell (1831– 79).***

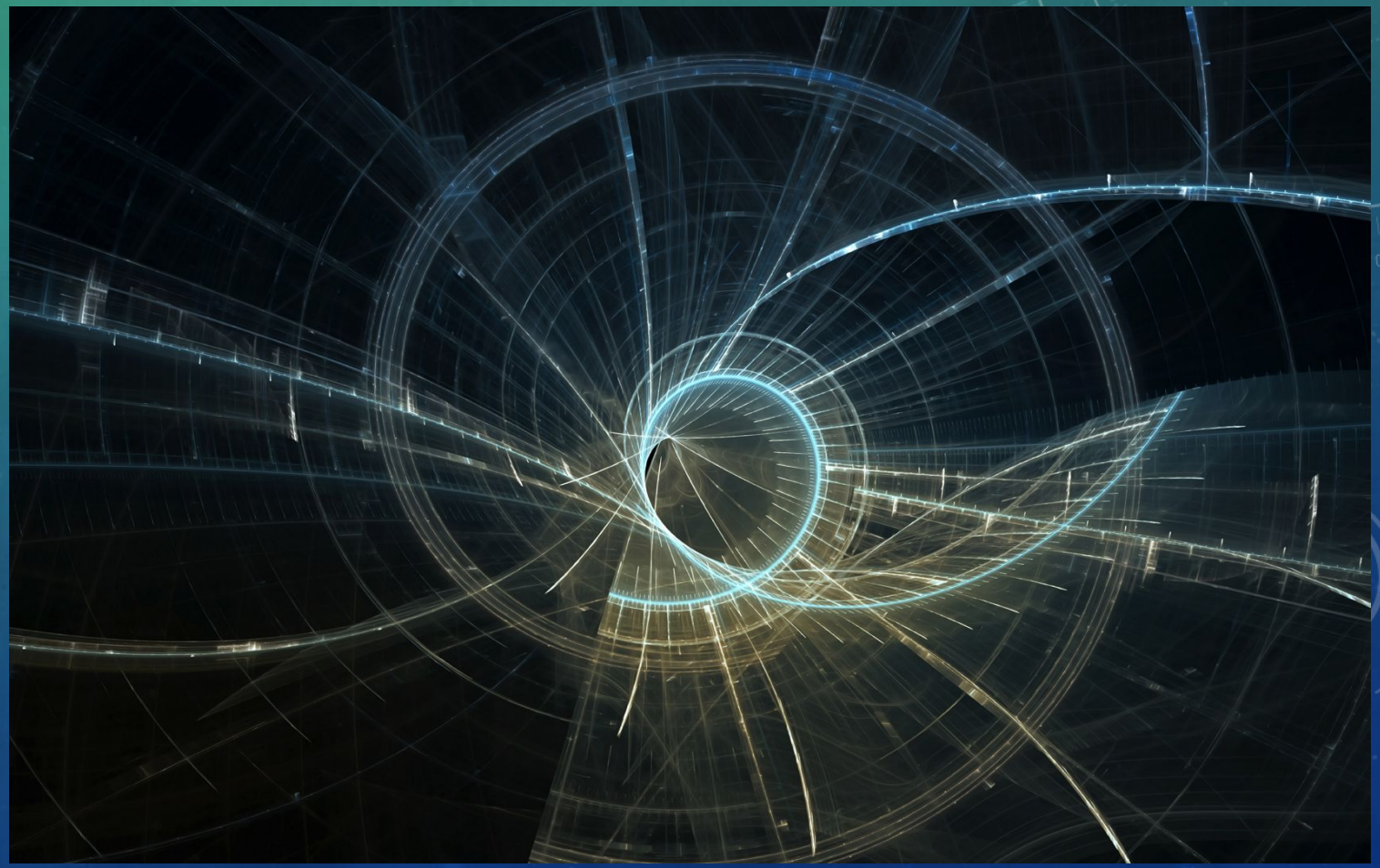


The discovery of penicillin, by biologist and pharmacologist, ***Sir Alexander Fleming (1881– 1955).***

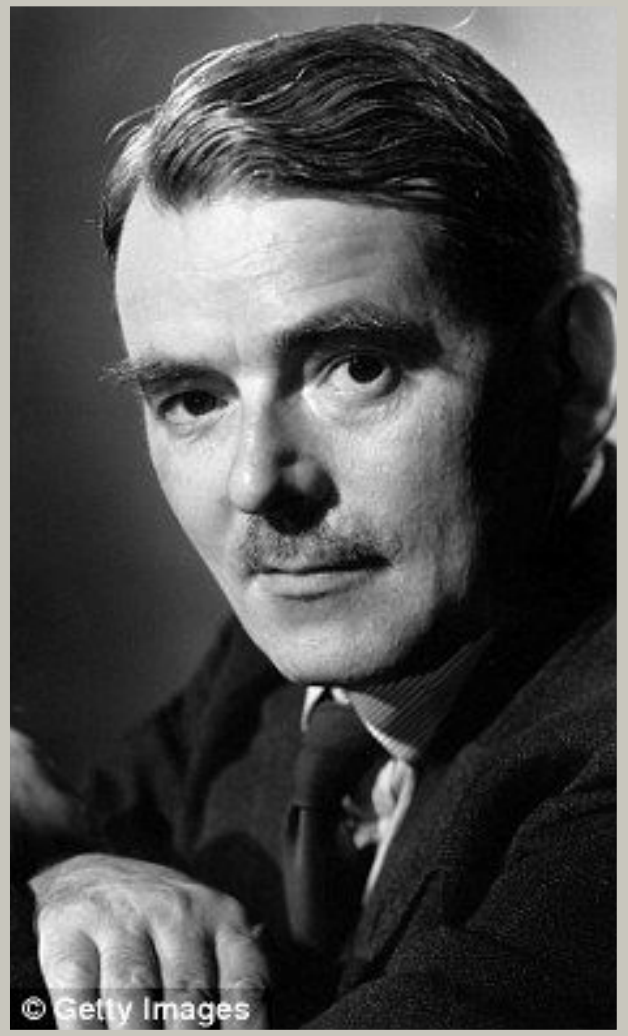


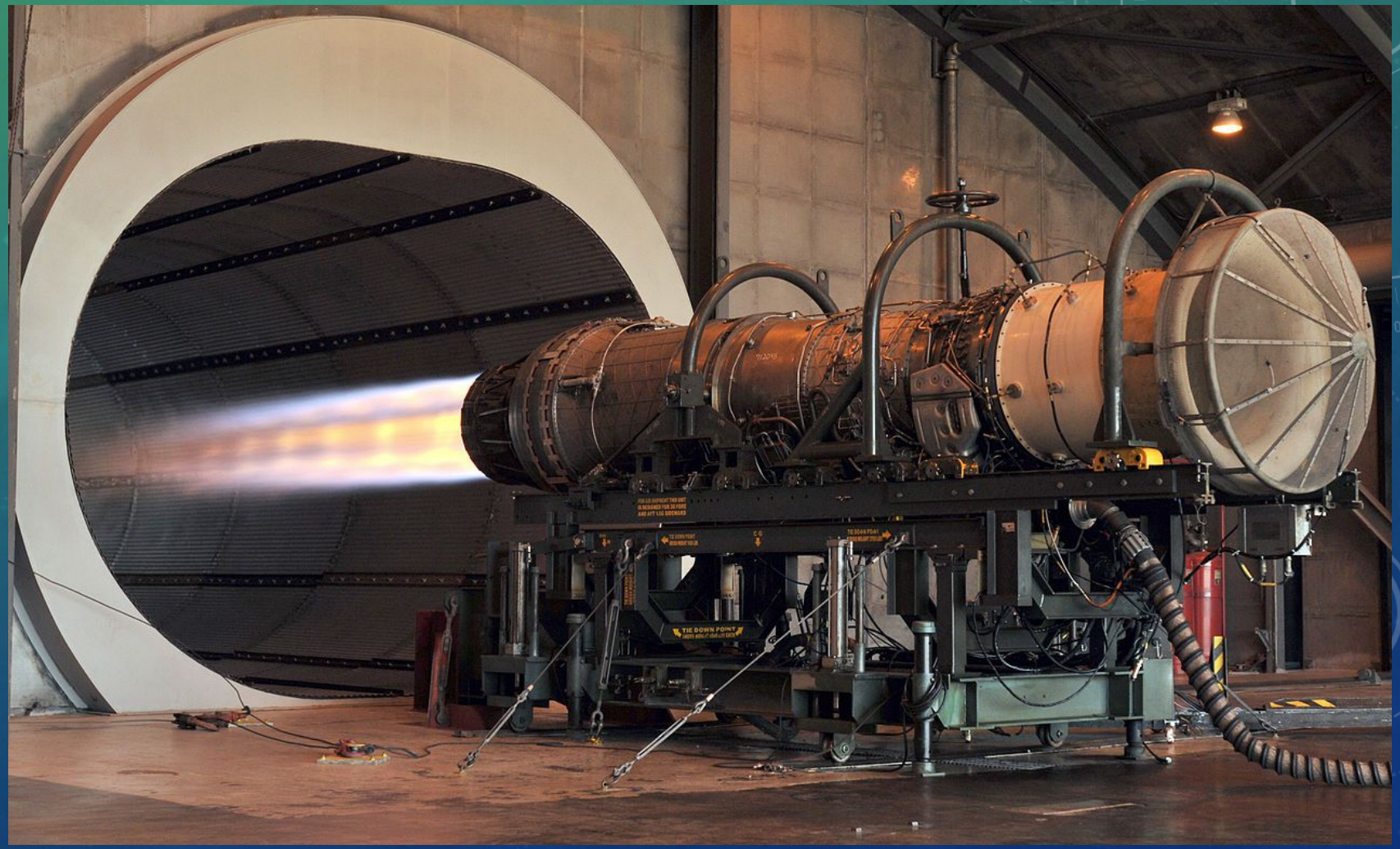
*The first meaningful synthesis of quantum mechanics with special relativity by **Paul Dirac (1902–84)** in the equation named after him, and his subsequent prediction of antimatter.*



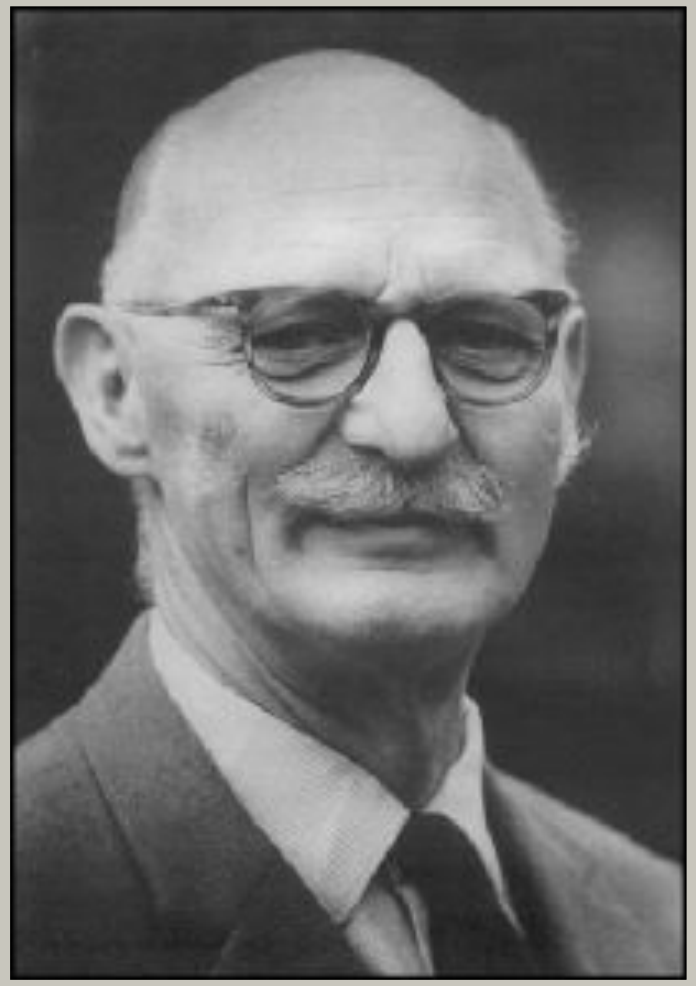


*The invention of the jet engine, by **Frank Whittle (1907–96).***

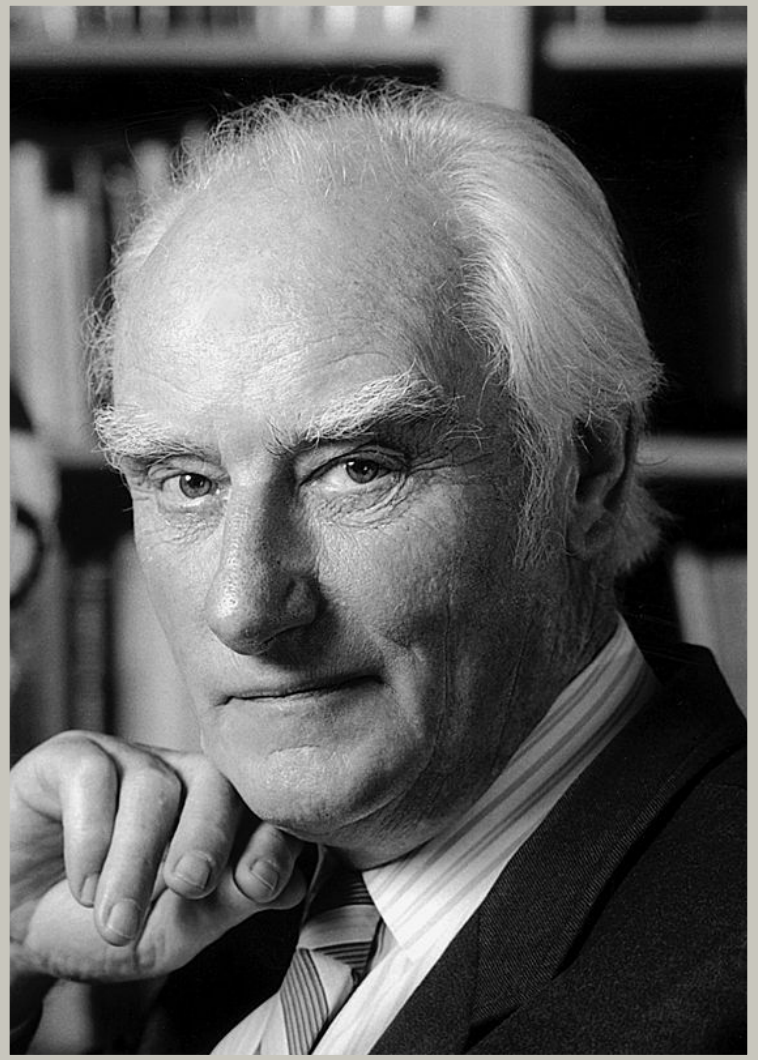




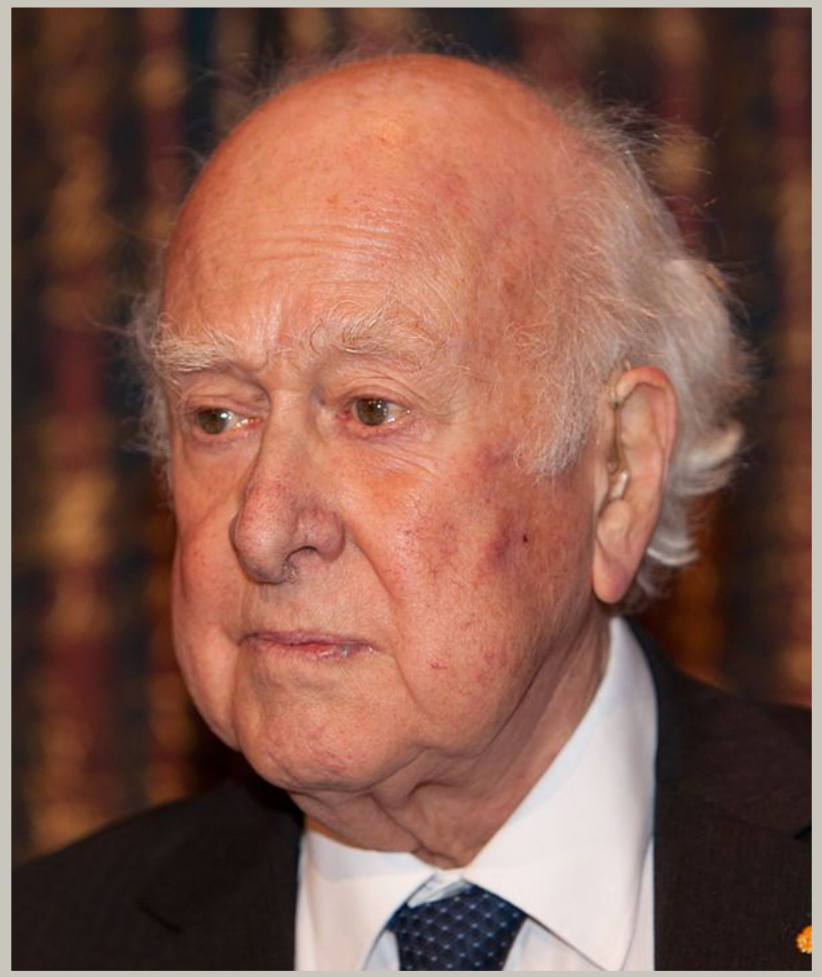
The invention of the hovercraft, by ***Christopher Cockerell (1910– 99).***

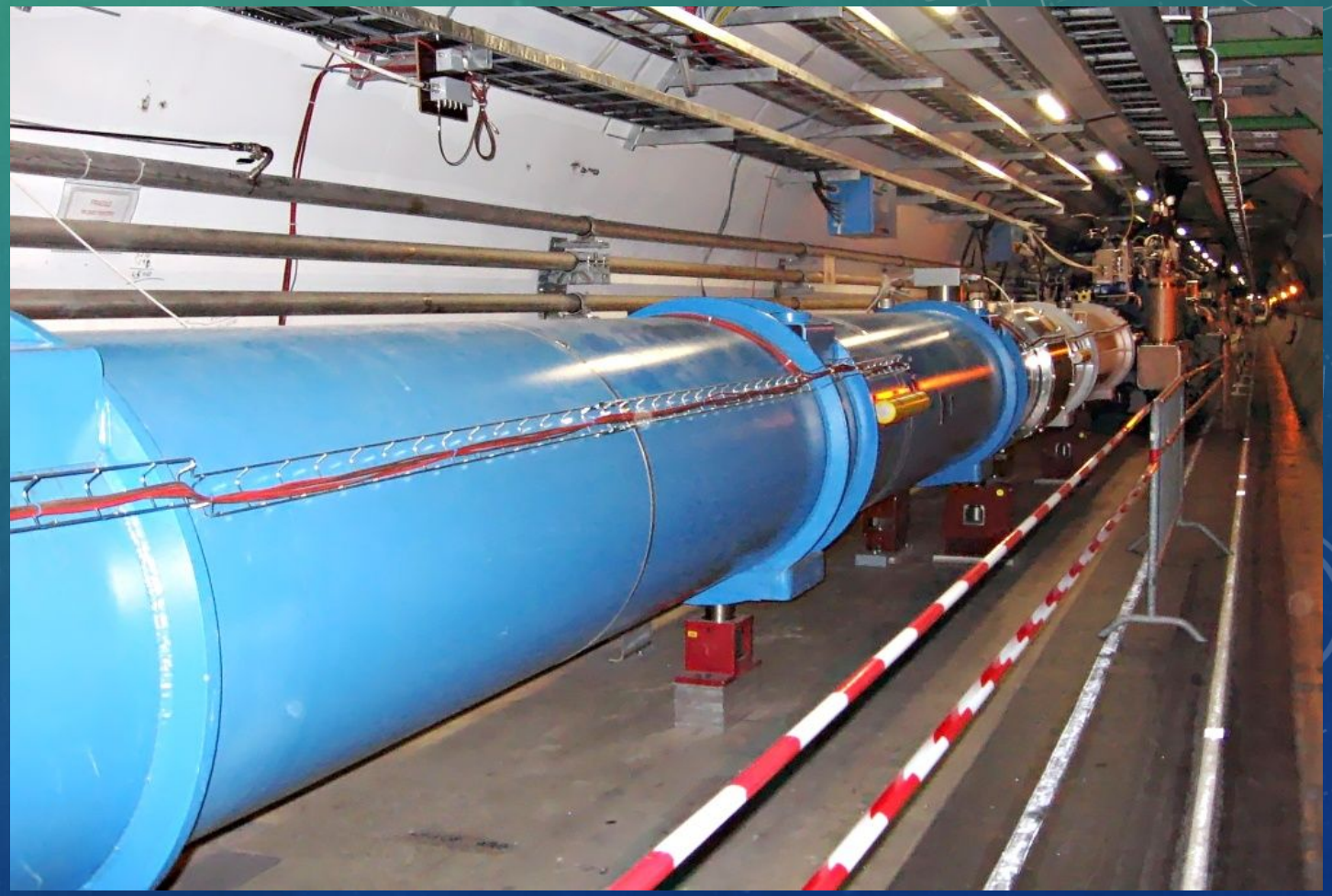


*The structure of DNA, by **Francis Crick (1916– 2004)** and others.*



The theoretical breakthrough of the Higgs mechanism to explain electroweak symmetry breaking and why some particles have mass, by ***Peter Higgs (1929-).***





*Theories in cosmology, quantum gravity and black holes, by **Stephen Hawking (1942–).***

To sum-up, nowadays, The UK has the most productive research base amongst the G7 (Group of Seven) and other leading research nations. The UK accounts for 3.2% of global expenditure on research and development and has less than 1% of the world's population, but produces:

- 6.4% of global journal articles
- 11.6% citations
- 15.8% of the world's most highly-cited articles.