

There's only One Queen Victoria!!!



CAUSES OF THE **INDUSTRIAL** REVOLUTION



"The Dog-Faced Boy" was one of the most popular attractions in London and Liverpool in the 1870s.



*Dresses became
so wide that
women would
frequently get
stuck in
doorways.*



*The Thames
was so full of
sewage and
dead animals
that you could
pretty much
walk across it*



*...and the
streets were
unbelievably
disgusting, too.*

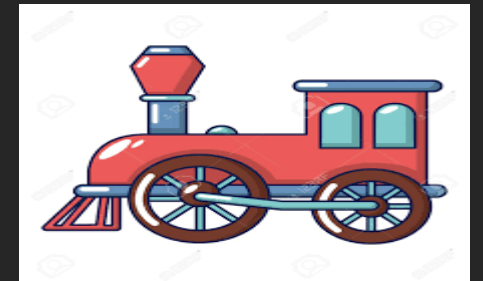


Victorian Railway Mania!!!

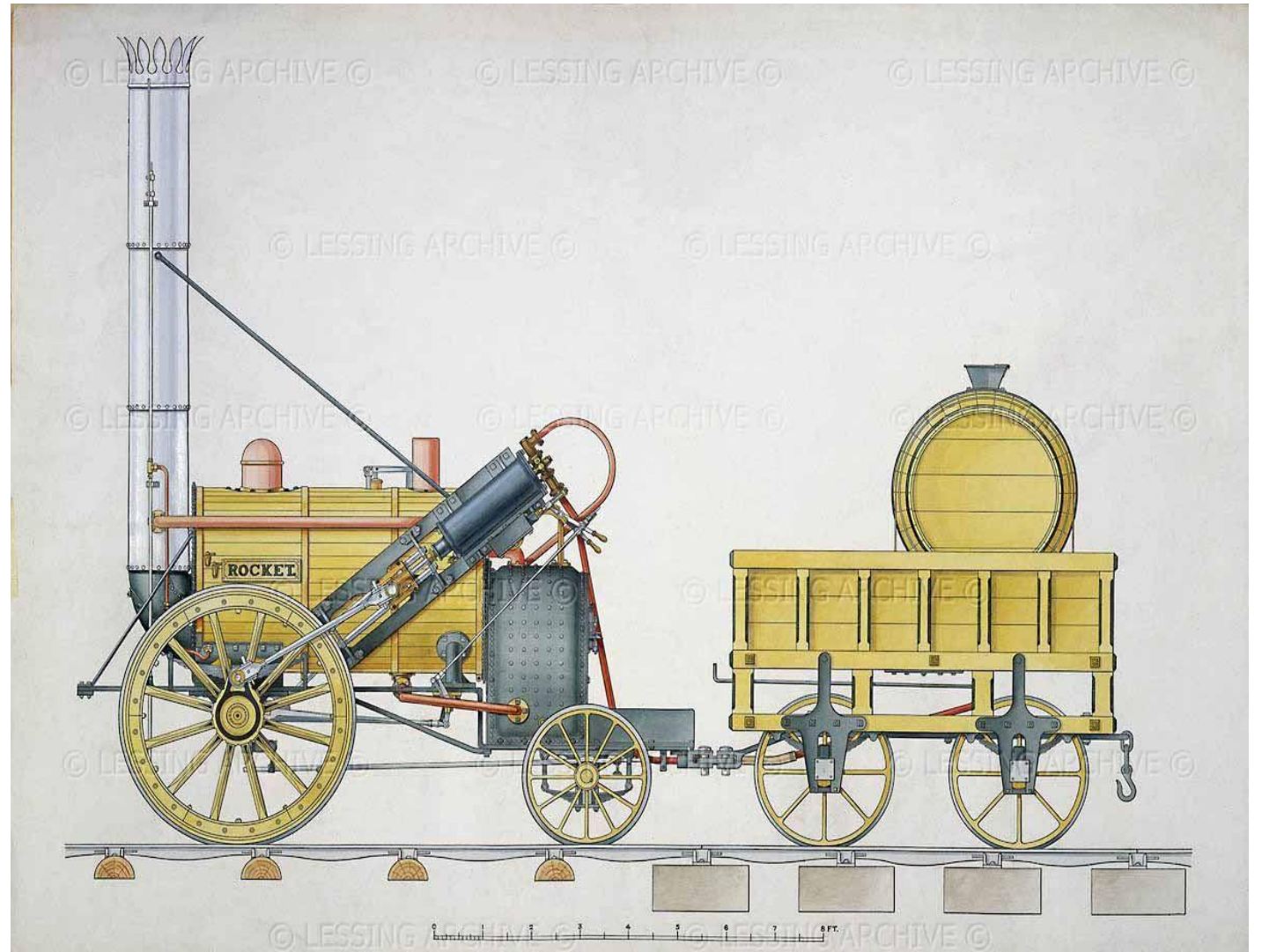




Britain – little change in 1800
Life was slow
Life was rural
Fastest thing was a galloping horse



***Steam
changed
everything!!***



Start of the Modern Railway Age

- One of the great achievements of the Industrial Revolution
- The end for canals and coaches
- 1804 – one of first locomotives – Richard Trevithick. Highly unreliable.
- 1813 “Puffing Billy” built by William Hedley to pull coal wagons. Used for 50 years!!
- Stockton and Darlington Railway 1825
 - *First in the world. A pioneering railway built by Stephenson*
 - *Two locomotives could pull 21 wagons 8 miles at 25mph*
- 1825 seen as the start of the Modern Railway Age.



Start of the Modern Railway Age

- 1826 - Stephenson given the task of building the Manchester to Liverpool line, subject to “The Rainhill Trials” to select the best train.
- 1829 - The winning train was the legendary Stephenson’s Rocket.
- 1830 - The Manchester to Liverpool line was opened.
- 1825 - 1837 95 lines were built
- 1838 - Robert Stephenson, son of George, built the London to Birmingham line
- 1841 - the stunning GWR was completed
- 1900 – 22000 miles of track existed carrying passengers by the millions



GWR

***The Great Western
Railway***

***God's Wonderful
Railway***

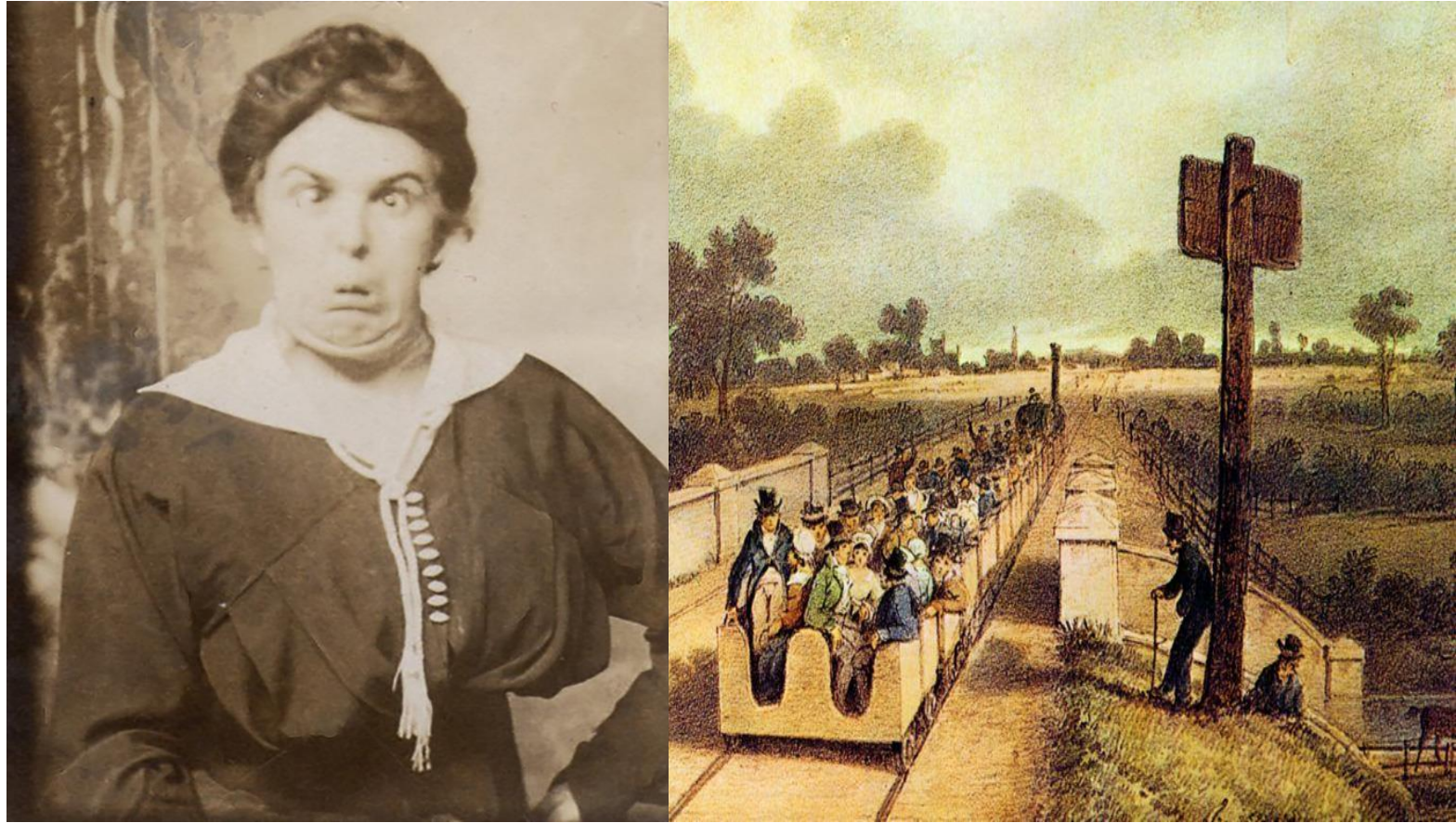
Isambard Kingdom
Brunel

https://www.youtube.com/watch?v=zovFQQ2SwBc&feature=emb_rel_end



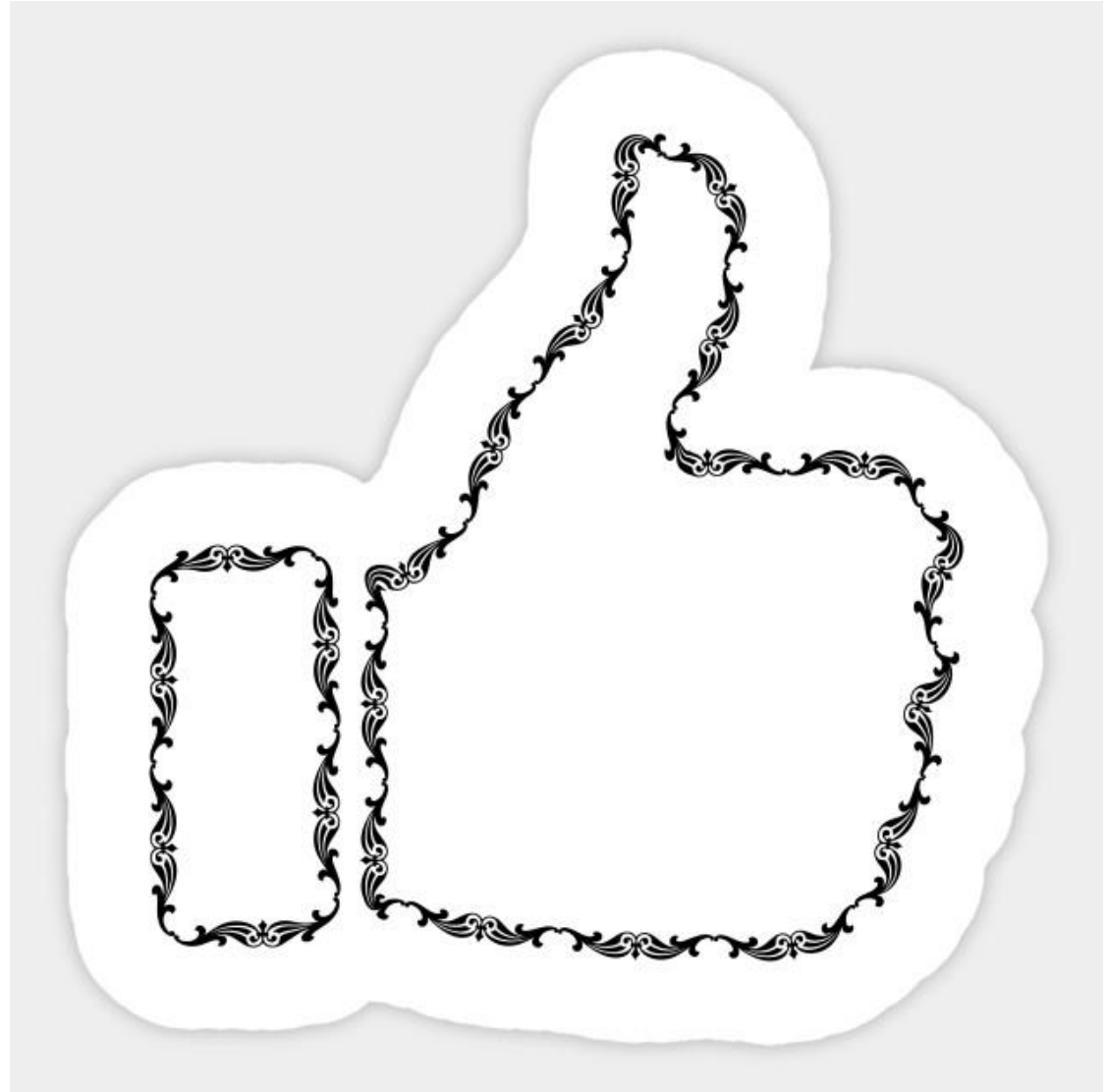
Nevertheless.....

- 25MPH a breakneck speed -Too fast!!!!
- Open carriages
- Carriage doors not closing properly
- “Railway Madmen” attacking passengers.
- Nerve damage due to swaying motion
- Different rail sizes – rail gauges
- Rails cracking led to some derailments
- Boiler Explosion!!!!
- Lack of Signalling and warning systems - journeys could be nerve wracking!!!



How did Railways change society?

- It was 50% cheaper than coach travel
- It was faster
 - greater speed and need for manufacturers to make more and make it quicker.
- Towns and cities had cheaper food
 - Farmers could get perishable food to market quicker and cheaper
 - Inland towns could get fresh fish!
- It was affordable – 3 classes of travel
- Peoples horizons and ambitions were broadened as the country became a smaller place.
- Railways gave easy access to many inaccessible parts of the country



Communication Revolution

- **1837 Telegraph technology.**
 - The first operational telegraph system linked Euston Station with Camden Town, London to Birmingham and GWR
 - It spread all over the national railway network to carry messages and control signals.
- **1839 Introduction of the Postage Stamp**
 - A boom in mail services supported by the railways.



Communication Revolution

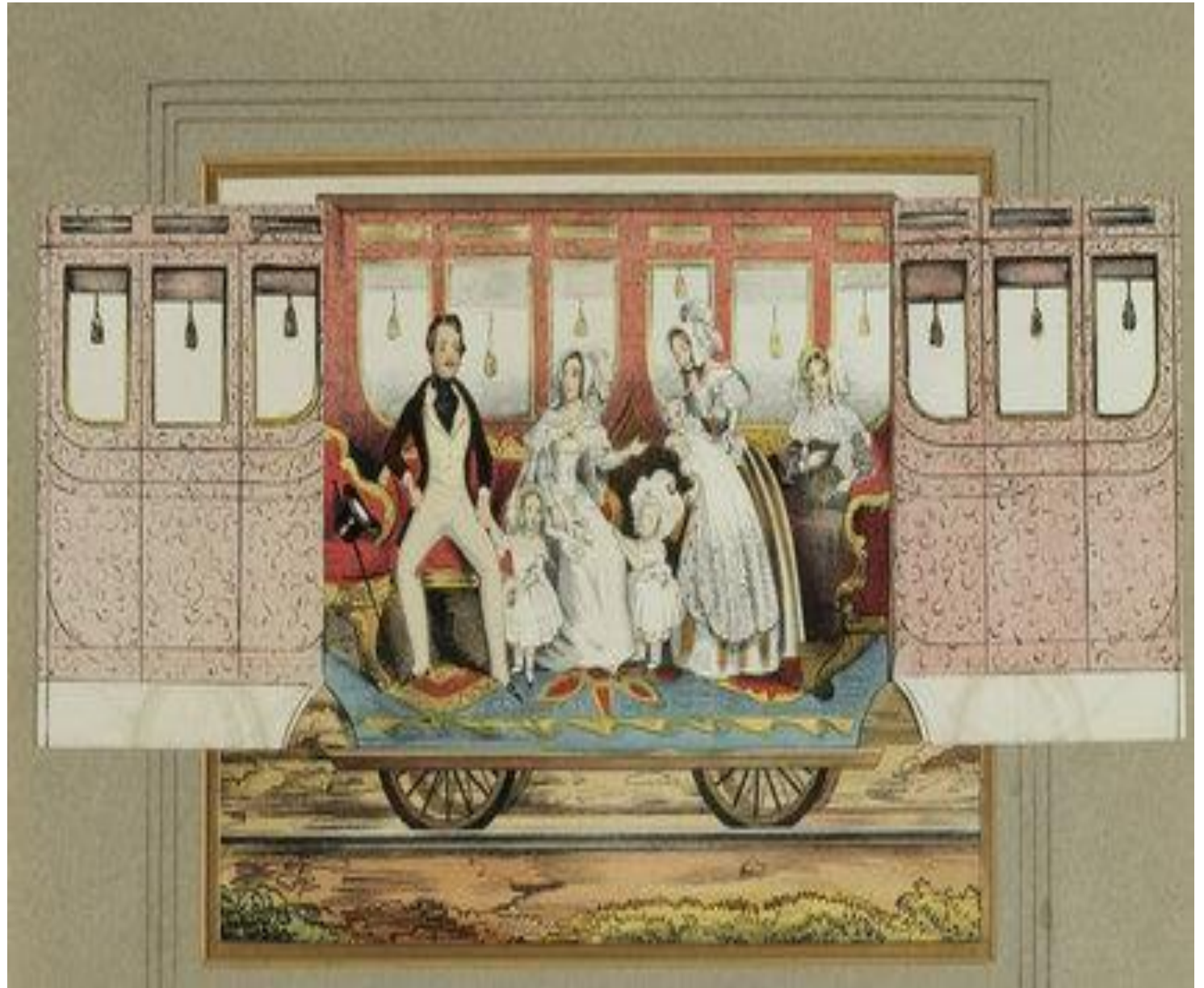
- *1846 – 1880 Wait a minute*
- *Railway Schedules were based upon London time or GMT.*
- *Until late 18thc all towns determined time by use of a local sundial.*
- *The differences in time between towns and cities could differ by up to 20 minutes!*
- *The slight time difference led to confusion in schedules and a risk of accidents*
- *1855 Railways adopted unified GMT*

1880 UK adopted GMT by law



Queen Victoria's railway journeys

- 1842 the first monarch to travel by train.
- From Windsor to Paddington in just 25 minutes in pure luxury
- Brunel was driving.
- She insisted the train go at a max of 30MPH at night and 40MPH during the day
- She would always travel to Balmoral by train – an overnight journey only versus several days and nights by horse and carriage



Your carriage awaits ma'am

- 1869 Commissioned her own carriage
- £1800
- 23carat gold paint and luxurious satin and silk interior
- 1901 Her last journey was the same as her first - Paddington to Windsor





- Building of the railway network – the major achievement of the Victorian Period
- Changed social patterns and landscape economically and physically
- Great engineers left a legacy through embankments, viaducts, tunnels and bridges
- Beautifully constructed stations of iron and glass which brought a different face to our cities, still remain and support us

Victorian Stations - London

Station	Annual Passemgers	Year
<i>Waterloo</i>	95m	1848
<i>Victoria</i>	75m	1860
<i>Liverpool St</i>	68m	1874
<i>London Bridge</i>	50m	1836
<i>Euston</i>	45m	1837
<i>Paddington</i>	37m	1854
<i>St Pancras</i>	36m	1868
<i>Kings Cross</i>	35m	1852
<i>Charing Cross</i>	29m	1864
<i>Cannon St</i>	24m	1866
<i>Vauxhall</i>	20m	1848
<i>Fenchurch St</i>	19m	1841
<i>Marylebone</i>	17m	1899
<i>Blackfriars</i>	12m	1886
<i>Moorgate</i>	11m	1865
<i>Waterloo East</i>	10m	1869
<i>Old St</i>	6m	1901

