

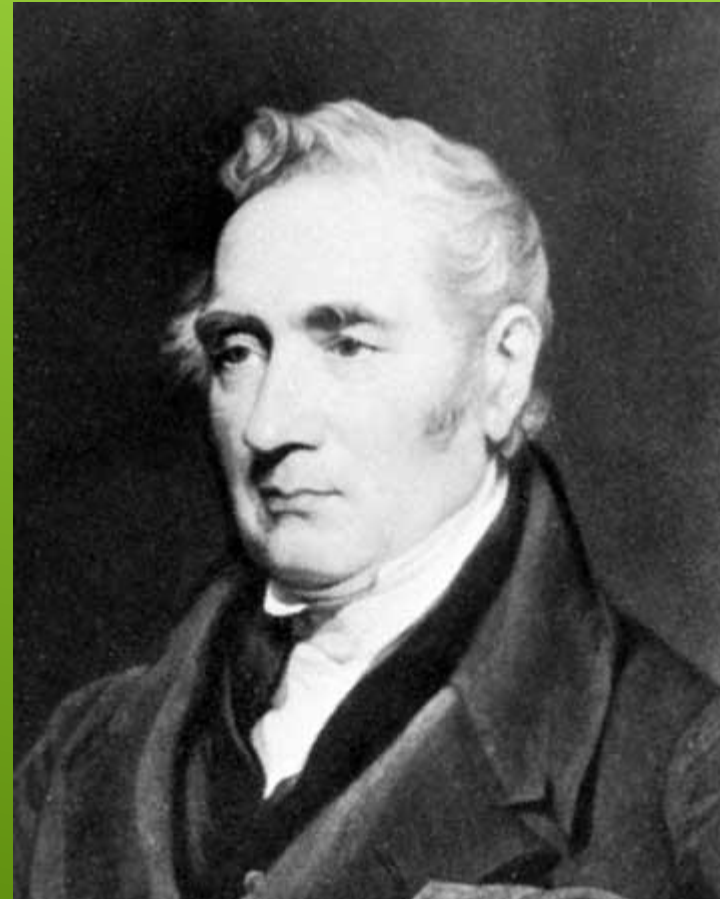
THE HISTORY OF RAILWAYS DEVELOPMENT IN RUSSIA AND IN THE WORLD



- ▶ One of the predecessors of the rail track was the ancient Greek diolcus. This is a stone portage road for transporting ships across the Isthmus of Corinth. It had deep grooves in which greased runners were placed.

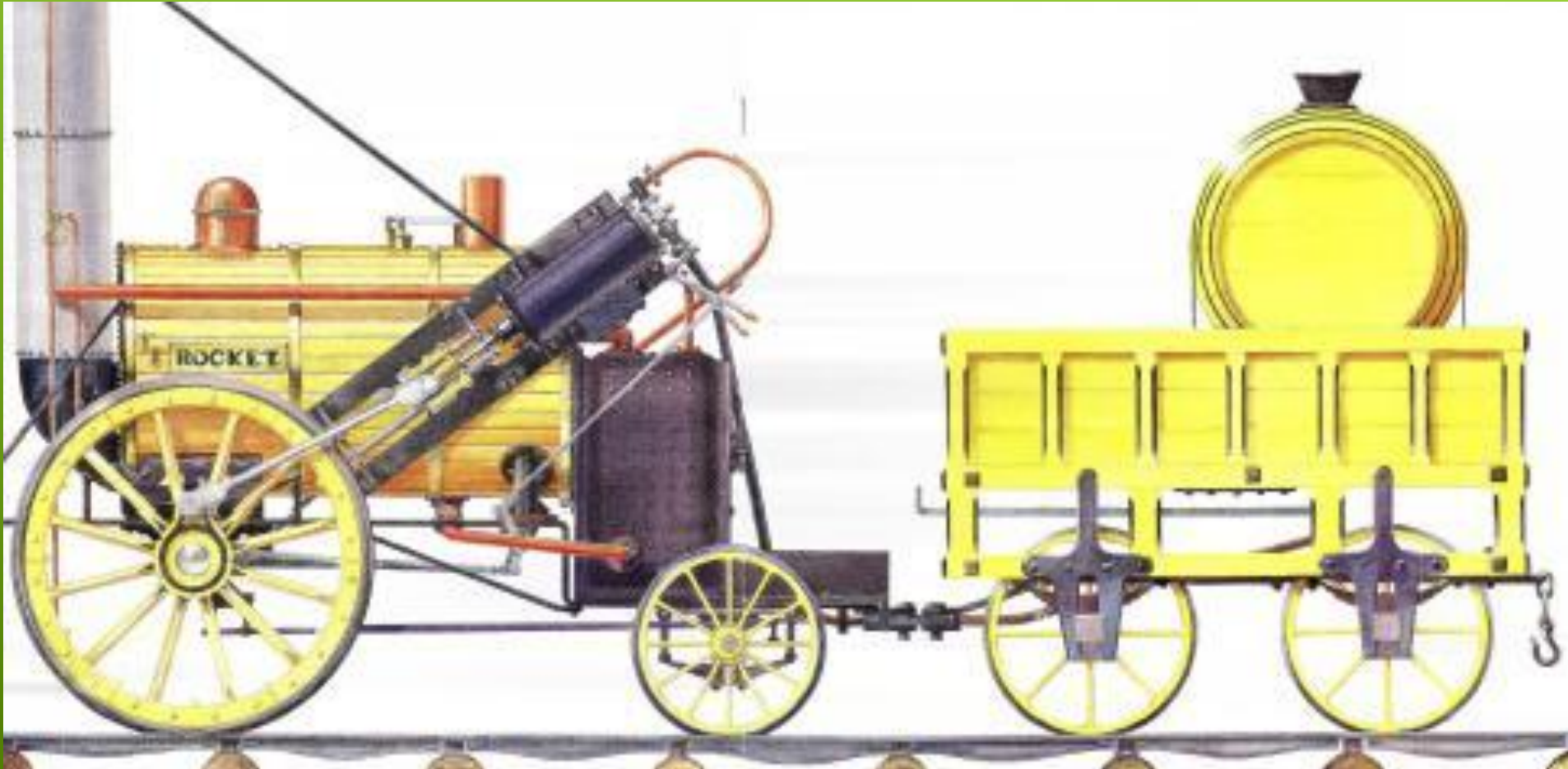


- ▶ The world's first public steam railroad was built in England by George Stephenson in 1825 between Stockton and Darlington. Its length was 40 kilometers (26 miles).



GEORGE STEPHENSON

- ▶ In 1829, George Stephenson built and tested his famous Raketa steam locomotive.





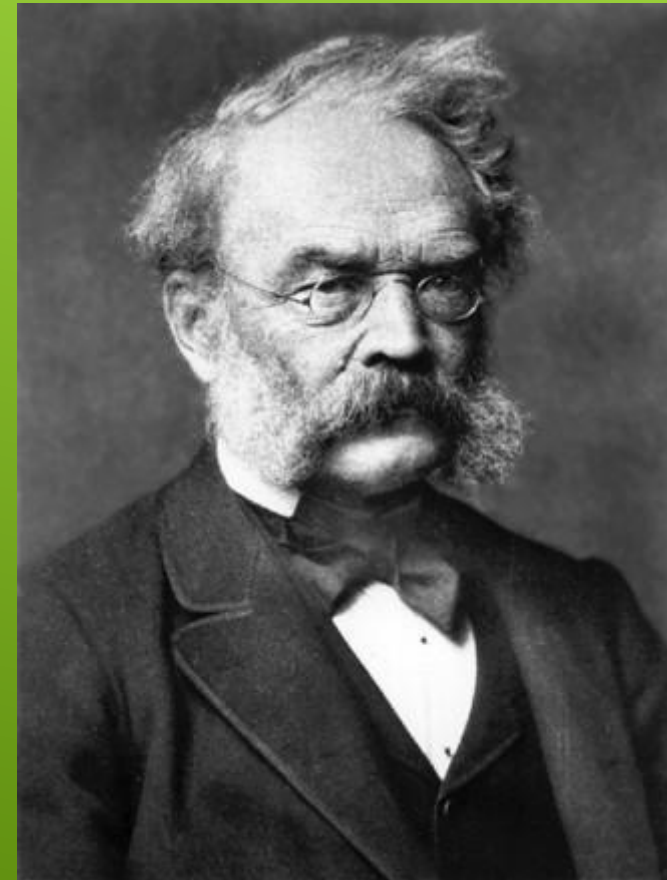
FRANZ GERSTNER

▶ In 1837, the first railway in Russia was built. She connected St. Petersburg with Tsarskoye Selo. Its track width was 1,829 mm. The construction was supervised by the Austrian engineer Franz Gerstner.



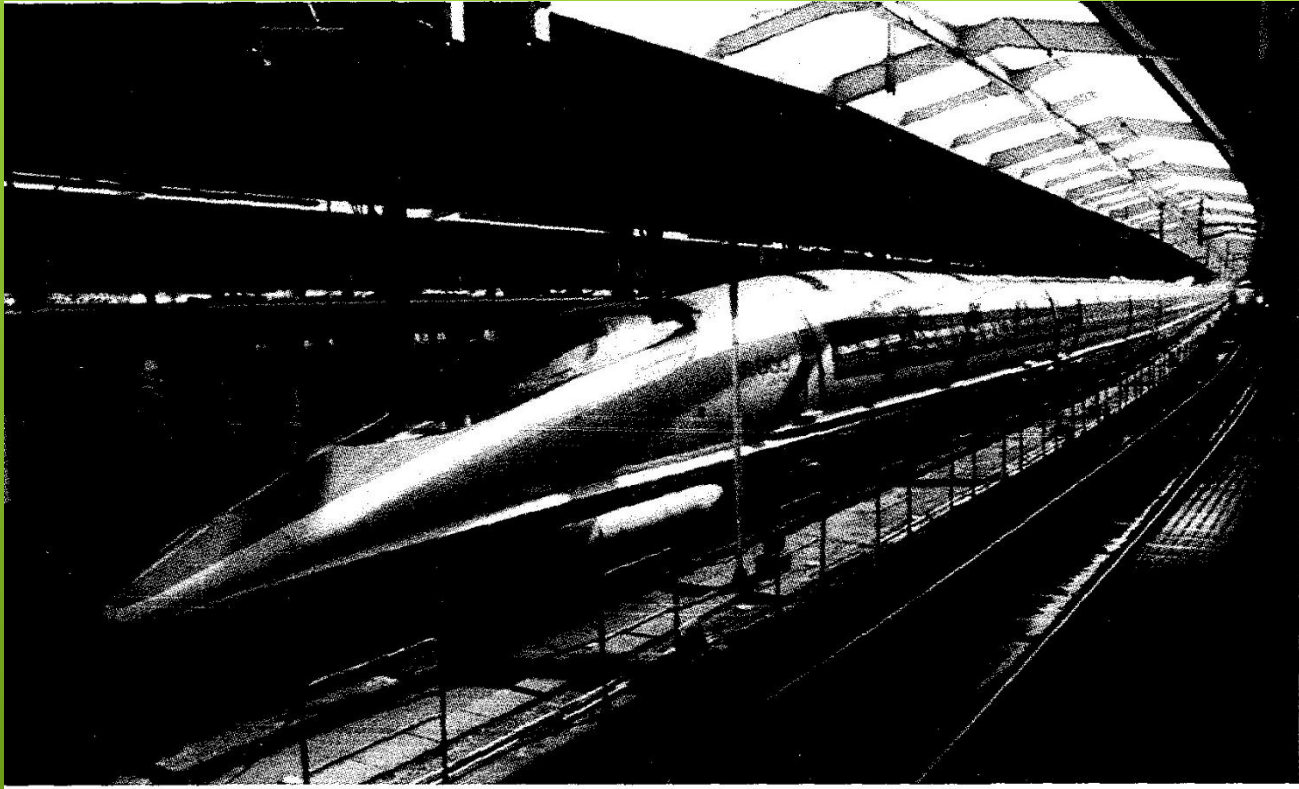
- ▶ In 1851, the first double-track railway St. Petersburg - Moscow was built in Russia. From August 6 (18), 1851 to the present time, the day of the railway troops is celebrated in Russia.

- ▶ On May 31, 1879, the first electric railway, 300 m long, built by Werner Siemens, was demonstrated at an industrial exhibition in Berlin. This day is considered to be the birthday of electric traction.



WERNER SIEMENS

- ▶ In Russia, there were projects for the electrification of railways even before the First World War. The electrification of the line has already begun. St. Petersburg - Oranienbaum, but the First World War prevented its completion. By 1935, 1907 km of tracks had been electrified in the USSR and 84 electric locomotives were in operation.



- ▶ The first regular high-speed train service began in 1964 in Japan. In 1981, VSNT trains began to run in France, and then in Great Britain.

- ▶ In Russia, the regular operation of high-speed trains "Sapsan", on common tracks with conventional trains, began at the end of 2009.



- ▶ On December 12, 2010, a high-speed service was opened on the Allegro train on the route St. Petersburg - Helsinki.



- ▶ In May 2013, at a meeting with President V. Putin, plans were announced to build 4,000 kilometers of high-speed highways in Russia by 2030.



▶ Thanks for attention!

