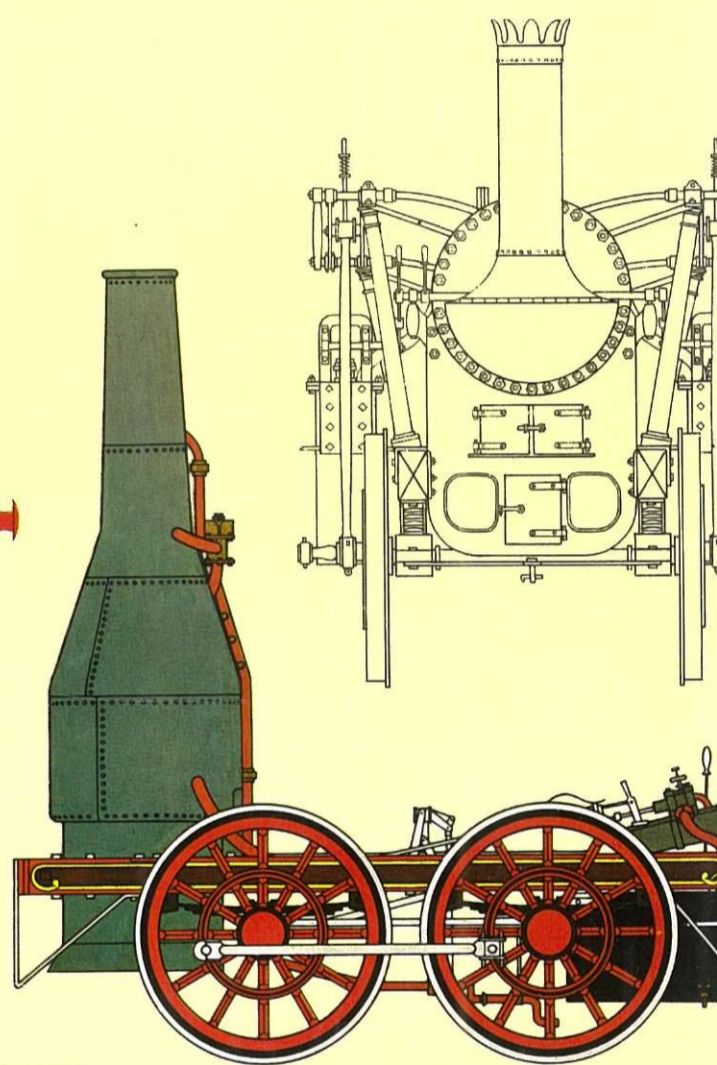
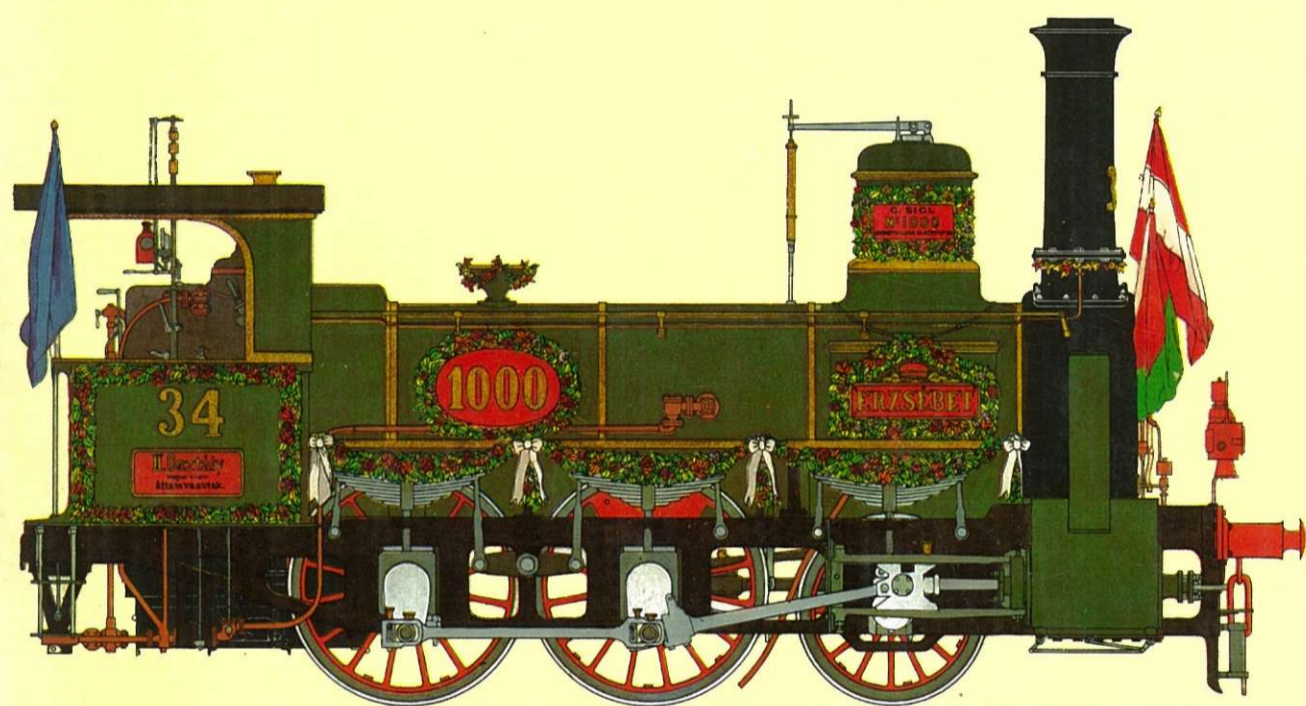
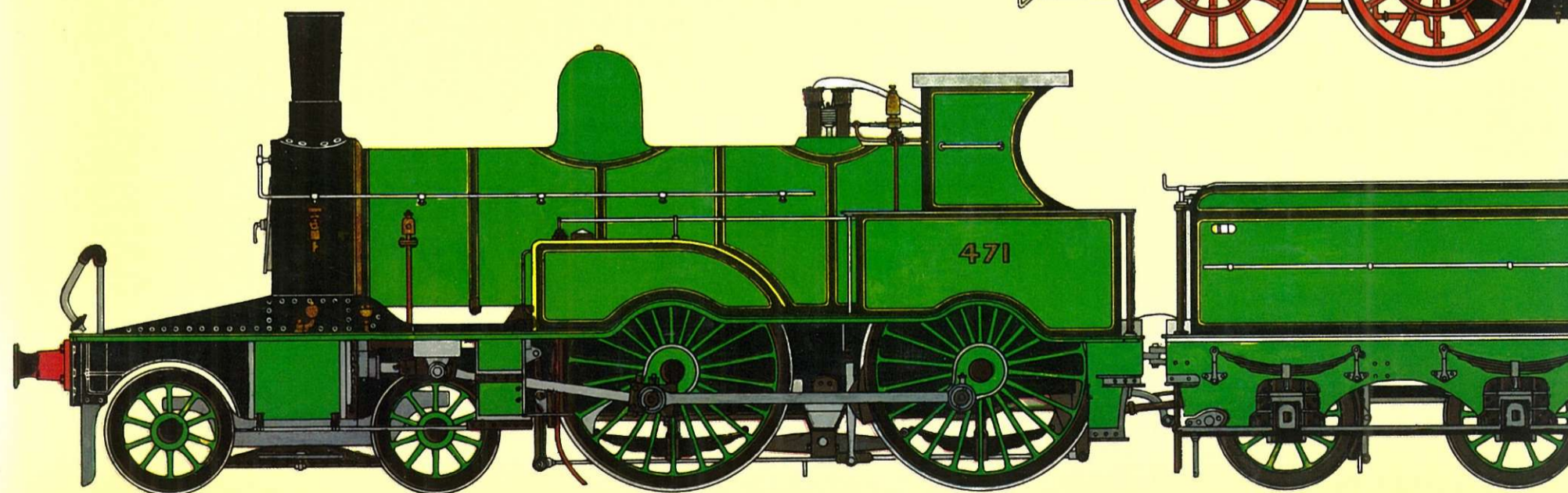
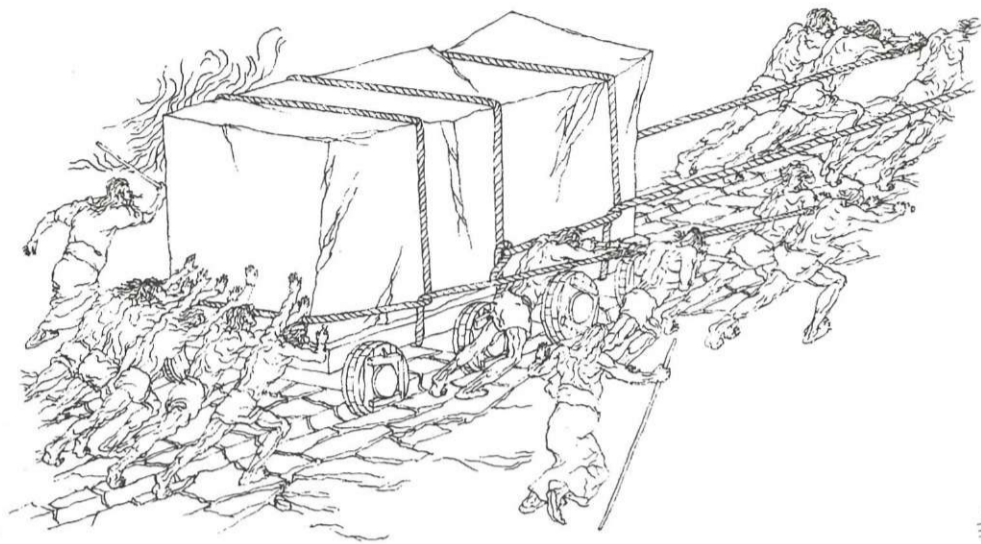


# THE LORE OF THE TRAIN



C. HAMILTON ELLIS



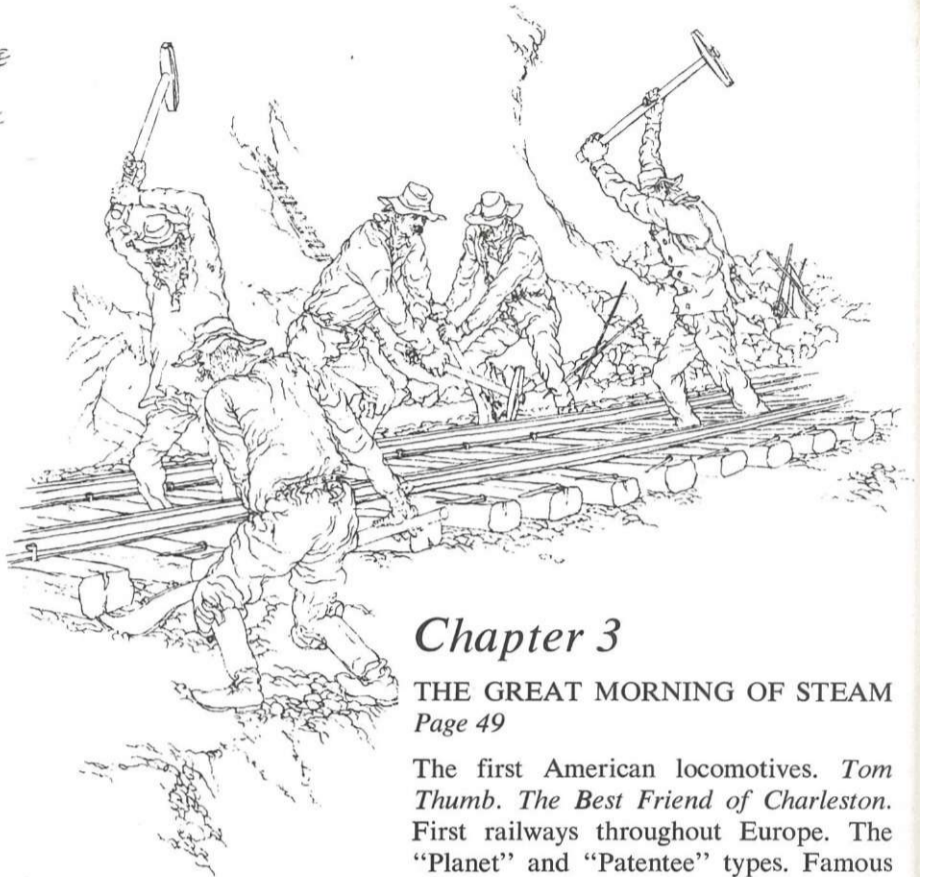


## Chapter 1

### PRIMEVAL FORMS

Page 15

What is a train? Rutted ways in early times. Mining railways in the Middle Ages. The first steam engines: Marquis of Worcester's, Savery's, Papin's and Newcomen's. Richard Trevithick and the first steam locomotive at Penydarren. *Catch-me-who-can* is exhibited in London, 1808.

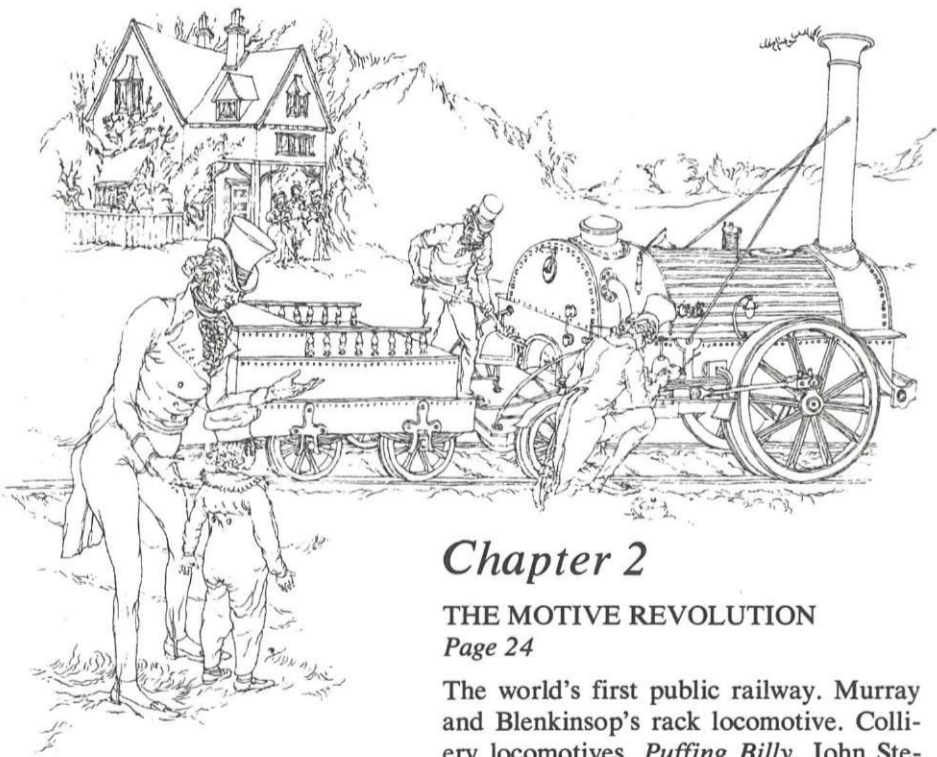


## Chapter 3

### THE GREAT MORNING OF STEAM

Page 49

The first American locomotives. *Tom Thumb*. *The Best Friend of Charleston*. First railways throughout Europe. The "Planet" and "Patentee" types. Famous locomotive engineers: Robert Stephenson, William Norris, August Borsig. Early passenger car design. The Railway Mania.

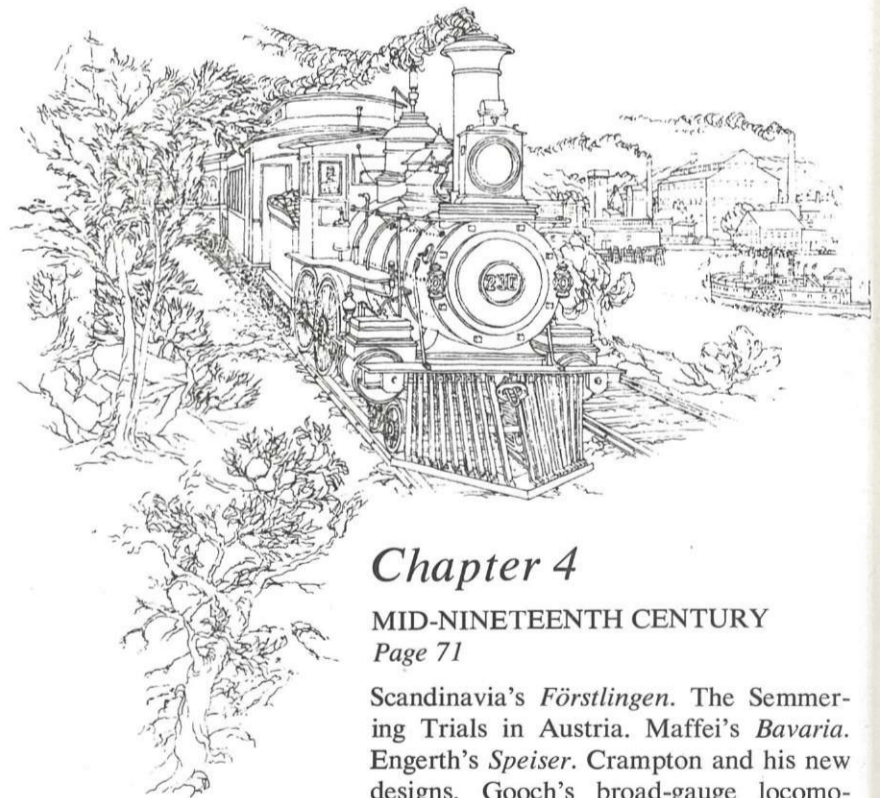


## Chapter 2

### THE MOTIVE REVOLUTION

Page 24

The world's first public railway. Murray and Blenkinsop's rack locomotive. Colliery locomotives. *Puffing Billy*. John Steven's rack locomotive. The opening of the Stockton and Darlington Railway, 1825. The Rainhill Trials. The *Rocket*. The Liverpool and Manchester Railway.

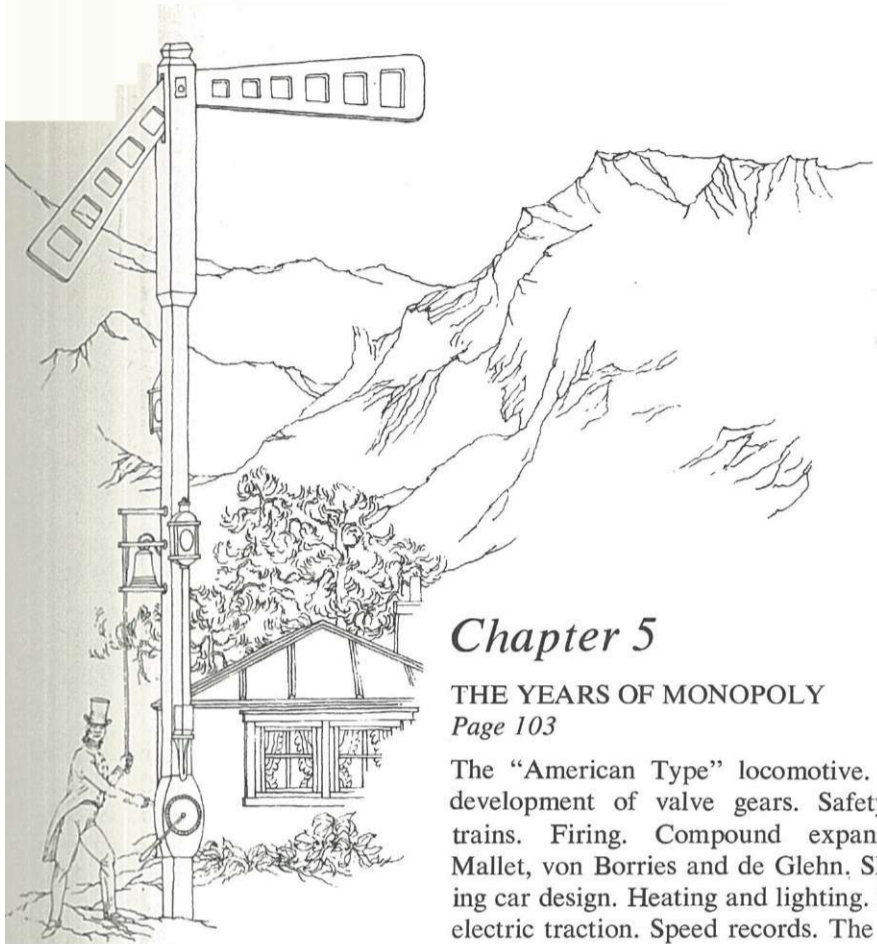


## Chapter 4

### MID-NINETEENTH CENTURY

Page 71

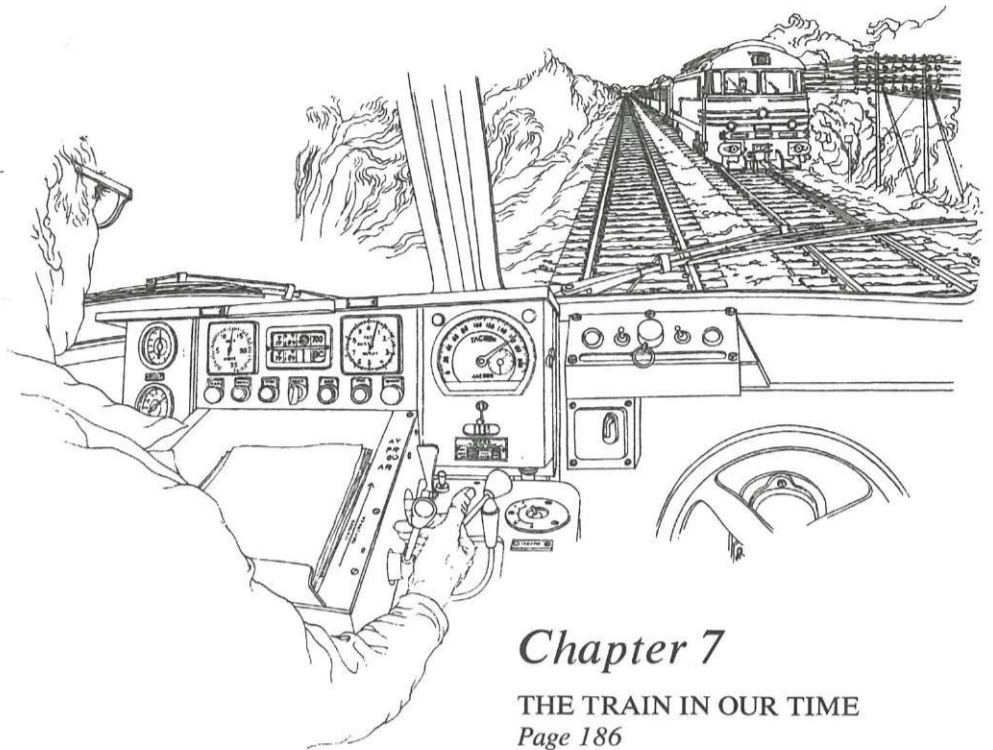
Scandinavia's *Förstlingen*. The Semmering Trials in Austria. Maffei's *Bavaria*. Engerth's *Speiser*. Crampton and his new designs. Gooch's broad-gauge locomotives. The first 2-6-0. Sleeping cars - Pullman, Nagelmackers. Mountain railways. The first underground city railway.



## Chapter 5

THE YEARS OF MONOPOLY  
Page 103

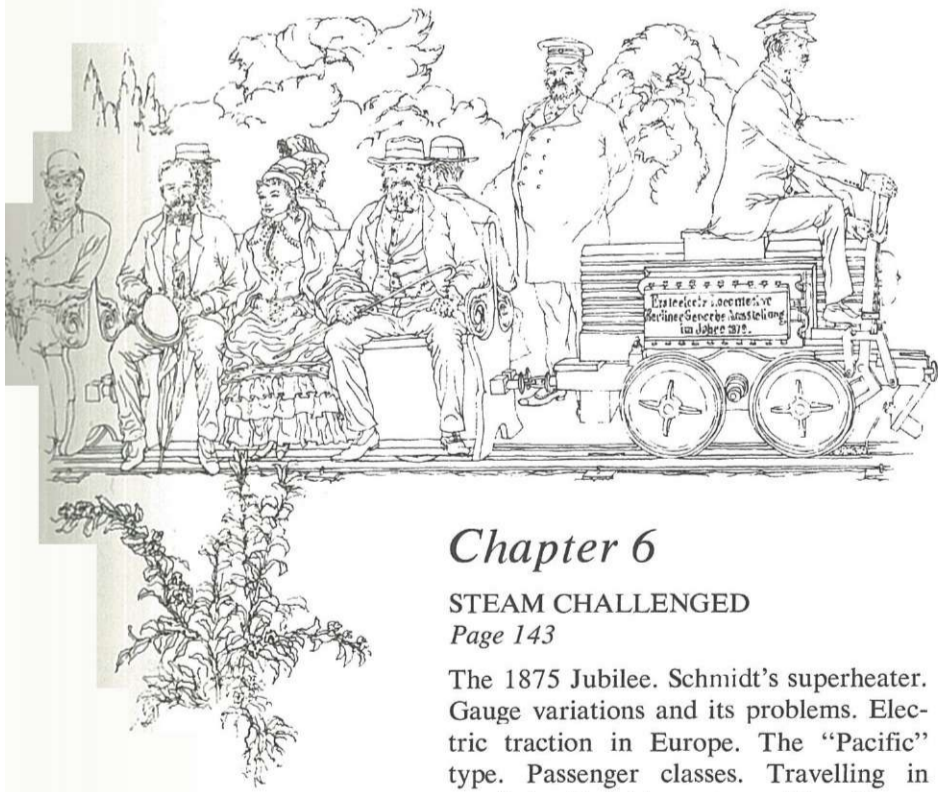
The "American Type" locomotive. The development of valve gears. Safety of trains. Firing. Compound expansion: Mallet, von Borries and de Glehn. Sleeping car design. Heating and lighting. First electric traction. Speed records. The Baltimore and Ohio electric locomotive.



## Chapter 7

THE TRAIN IN OUR TIME  
Page 186

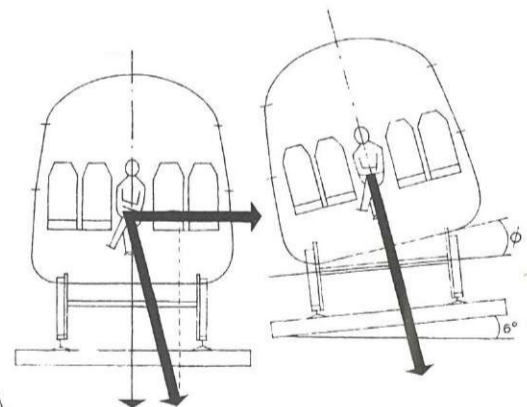
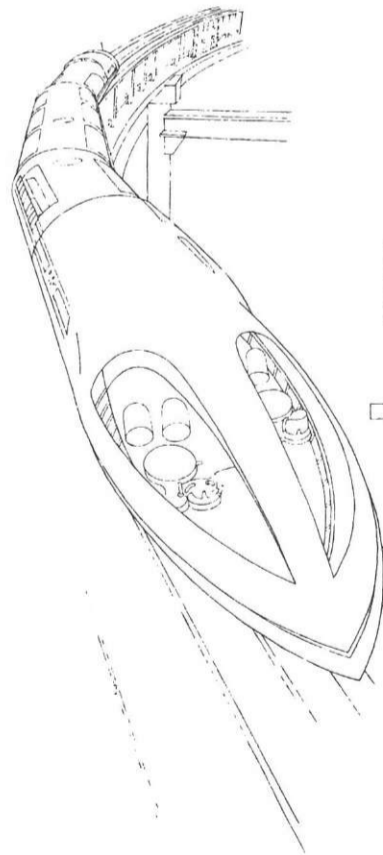
Electric and diesel traction. Advances in locomotive engineering. The steam engine's rearguard action. Mechanical stokers. Boosters. Turbine steam locomotives. Specialized freight cars. The Trans-Europ-Express. City transit. French electric locomotives. The Tokaido Express.



## Chapter 6

STEAM CHALLENGED  
Page 143

The 1875 Jubilee. Schmidt's superheater. Gauge variations and its problems. Electric traction in Europe. The "Pacific" type. Passenger classes. Travelling in comfort. Freight engines. The Beyer-Garrat. Snow-plows. The first Diesel engines. Monorails.



## Appendix

THE FUTURE OF THE TRAIN  
Page 233

A special section written by P. M. Kalla-Bishop for this book. Present developments are described: automatic railways, high speed on steel railways, unorthodox railways. The linear electric locomotive. The tracked hovercraft system. The "tilting body" train. The magnetic levitation train.