The bachelor thesis presents railway phenomena and technical applications through grammar school physic. The underlying physical principles are easily visible to the ordinary eye when travelling by train. These phenomena can then be divided into mechanical, including thermal phenomena, and electrical. The work is written as a teacher's guide for physic classes, or rather a sort of stock of knowledge that can be refer to as practical examples. At the same time, the work is also designed for students who can read the text on his own, or for the less instructed interested in the subject.