

Why was the Mansfield and Pinxton Railway created?



well read
informed communications

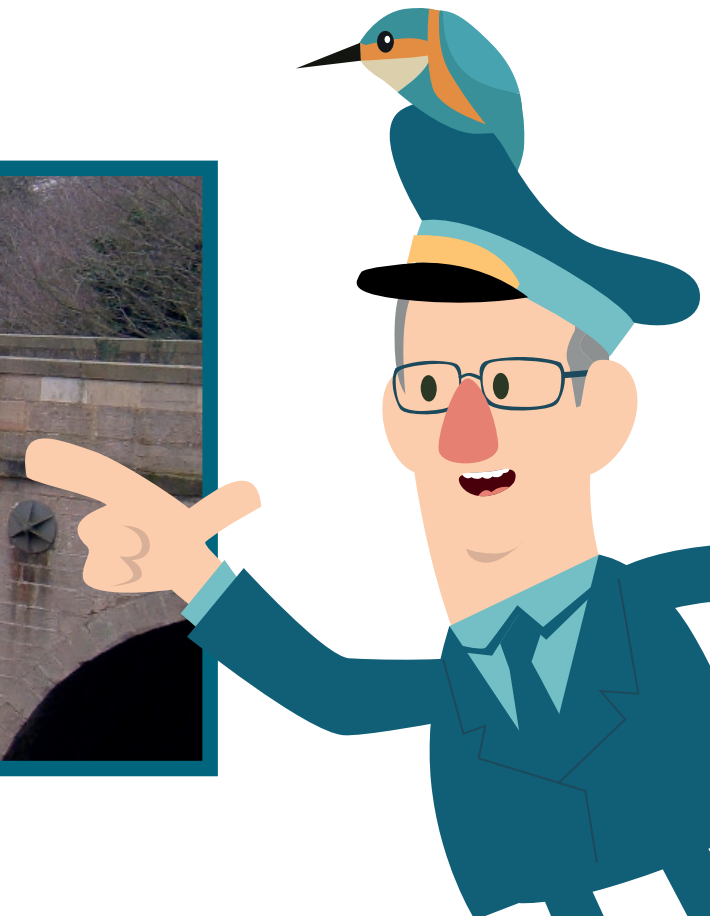
This education Pack developed by Kate Dawson at Well Read in consultation with local heritage groups and schools. Particular thanks to Denis Hill, Heritage Consultant for his help providing historic background.

M&P_LITS

at Mill Waters heritage site

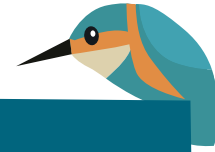
Evidence of the old Mansfield and Pinxton Railway

Do you know where this viaduct is?
Do you know why it was built?



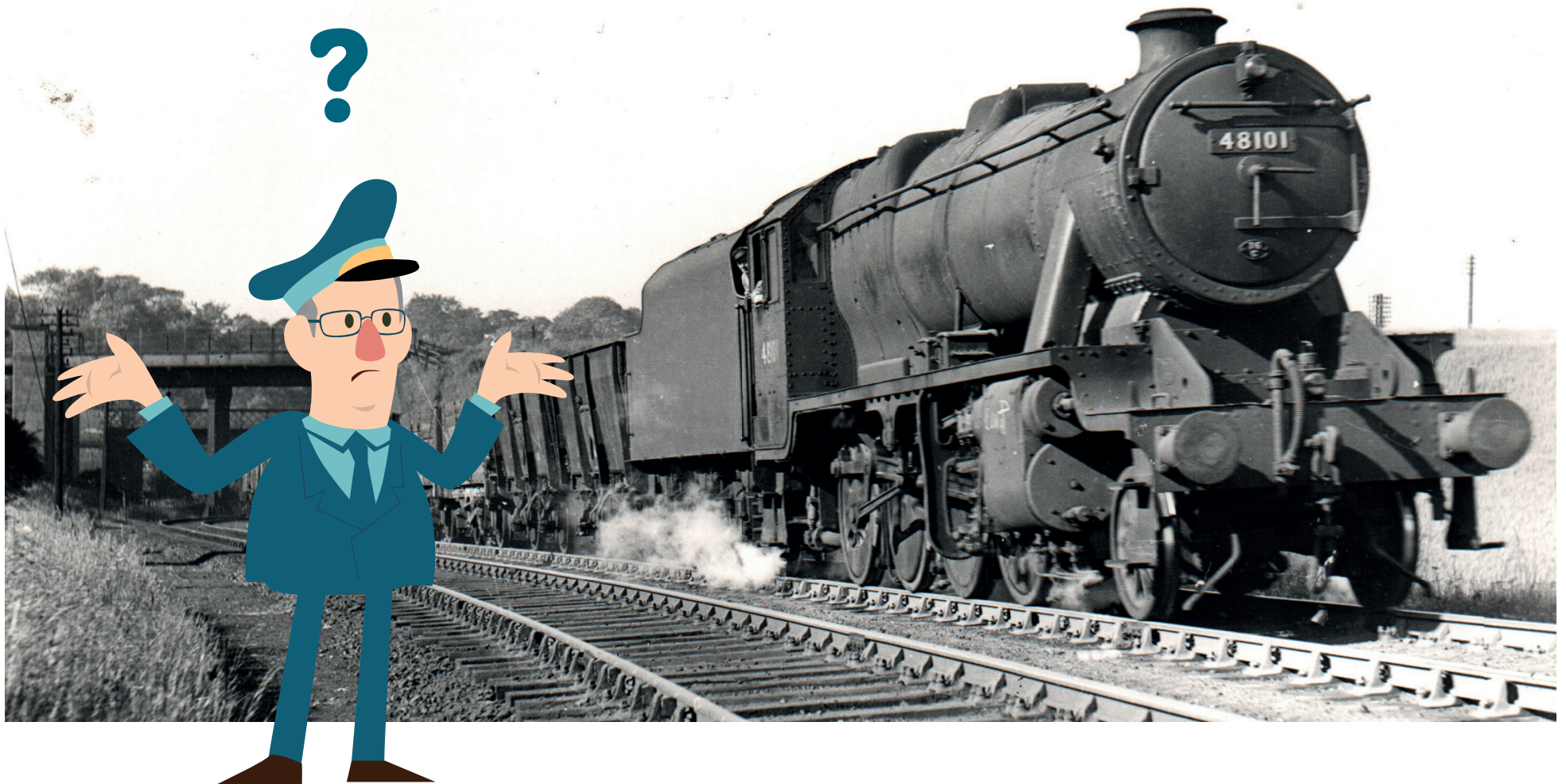
Road and canal transport





What is a freight train?

?





**What goods were transported
out of the local area?**

Limestone

Limestone is a hard sedimentary rock, composed mainly of calcium carbonate or dolomite.

Limestone is used as a building material and to make cement.



The Galleries of Justice in Nottingham (the old Shire Hall and County Gaol) is built with limestone.



Sandstone

Sandstone is hard-wearing and durable making it a good building material. It can also be used to make fountains and statues as it is easily carved.

Sandstone is a sedimentary rock composed of sand-size grains of mineral, rock or organic material.



Southwell Minster built with Mansfield White Sandstone.



Malt

Malting is part of the process for making beer.

The raw ingredient for malt is barley.



Beer was the staple drink for most people before tea and coffee became popular.

The Old Malthouse, Mansfield





Other goods



Sand



Bones



Manure



**What goods were transported
into the local area?**

Coal

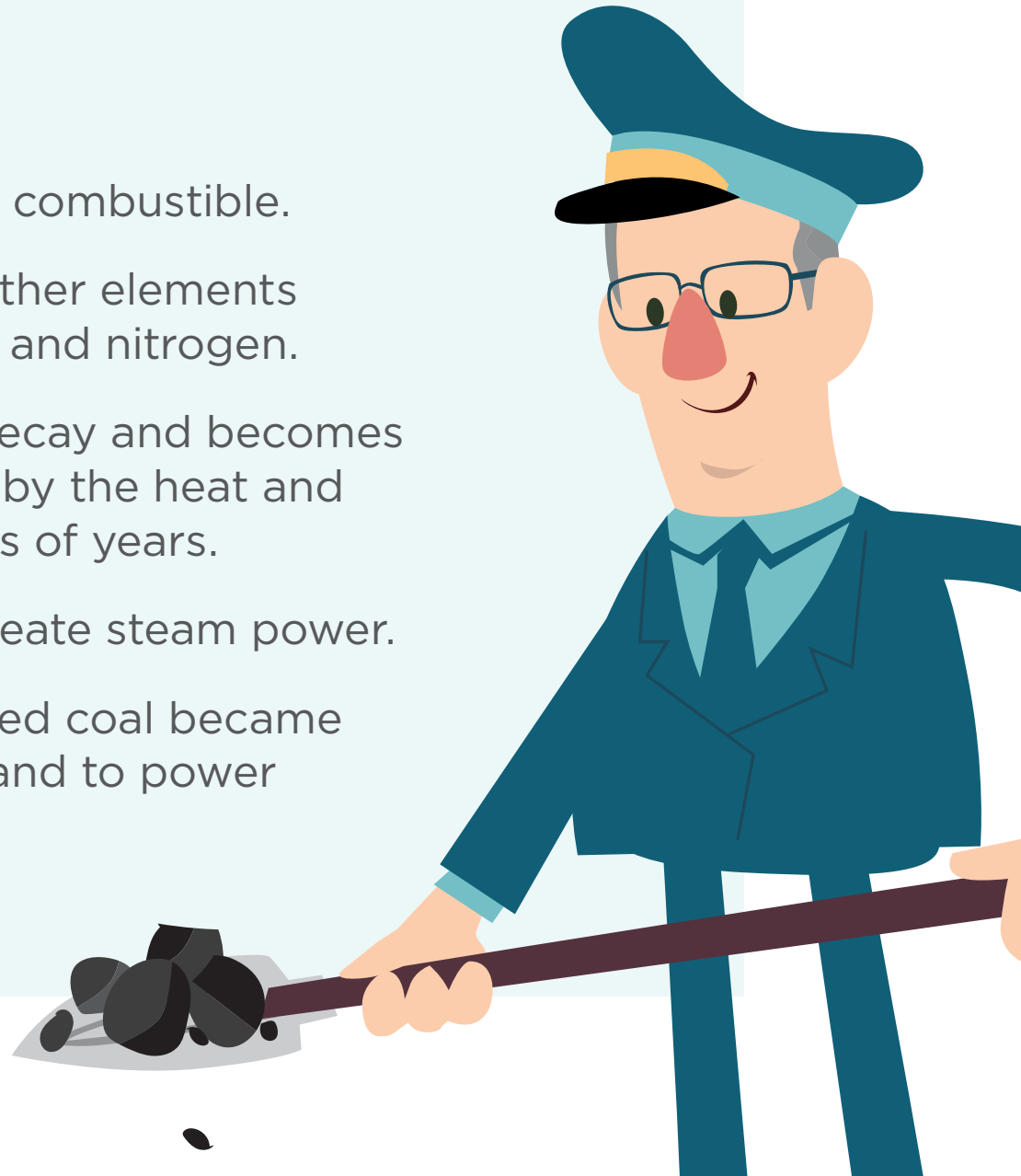
Coal is a sedimentary rock which is combustible.

Coal is mostly carbon mixed with other elements such as hydrogen, sulphur, oxygen, and nitrogen.

Coal is formed when dead plants decay and becomes peat - it then gets turned into coal by the heat and pressure of being buried for millions of years.

Coal is burnt to heat up water to create steam power.

When the steam engine was invented coal became really important to manufacturing and to power the steam trains.



Iron

The main use of iron ore is in the production of iron. Most of the iron produced is then used to make steel.

Steel is used to make:

- Cars
- Locomotives
- Ships
- Beams used in buildings
- Furniture
- Paper clips
- Tools
- Reinforcing rods for concrete
- Bicycles and thousands of other items



How were goods transported before the railway?

Before the railways, goods were transported around by the canals and across short distances by wagons pulled by horses along roads.

A network of canals – which are man-made rivers – enabled goods to be transported longer distances.

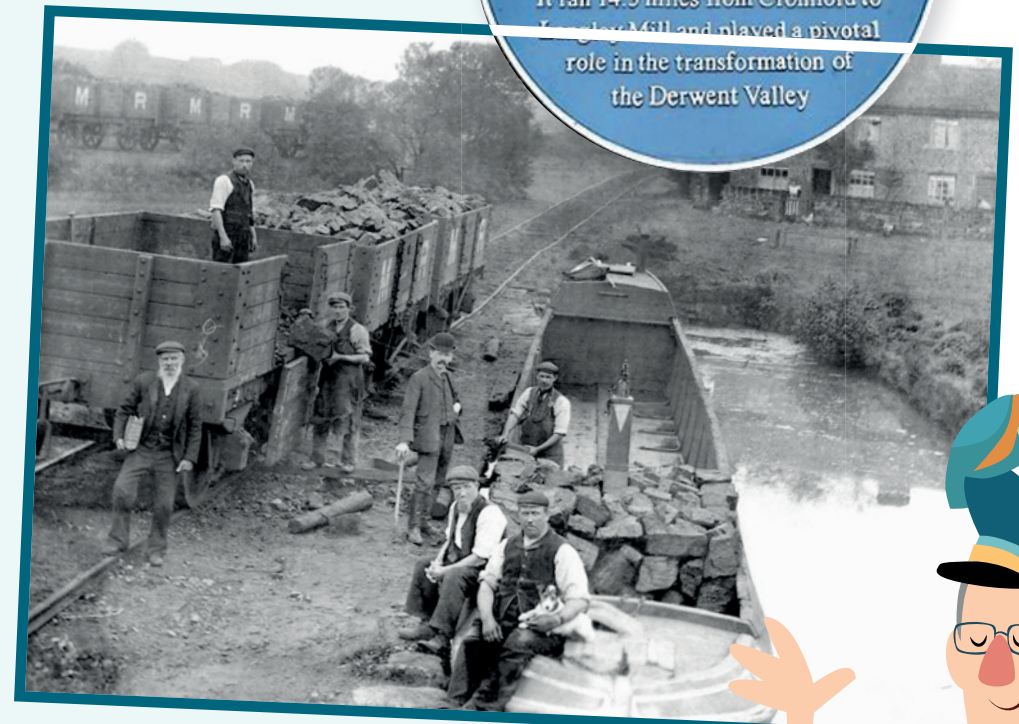


The Cromford Canal

The Cromford Canal opened in 1794.

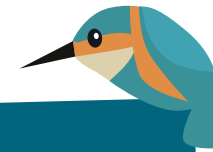
At its peak it was transporting around 300,000 tons of goods every year.

It included a 2.74 kilometre long tunnel called the Butterley Tunnel that went through Butterley Hill.



A map of the

Cromford Canal route



Cromford Wharf

Pinxton

Leawood Pump

Derwent Aquaduct

Gregory Tunnel

Crich

Bucklands Hollow

Bullbridge

Butterley Tunnel

Ambergate

Amber Aqueduct

Ripley

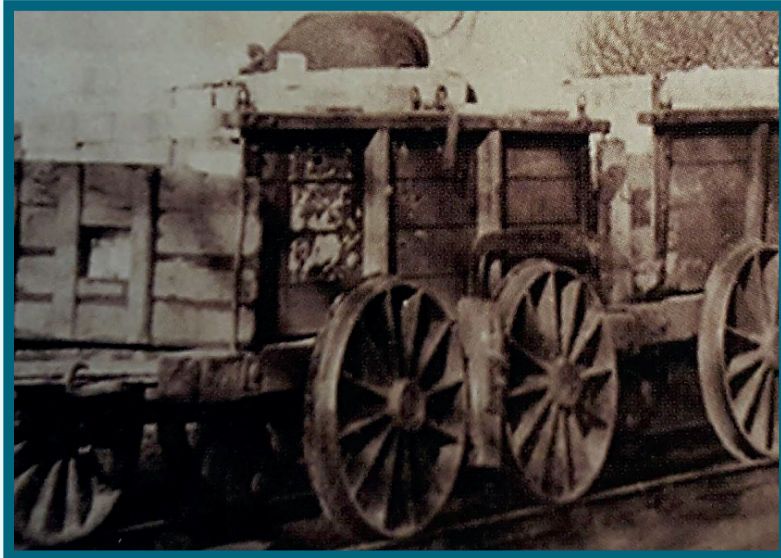
Hag Tunnel

Codnor

Langley Mill



The early braking system



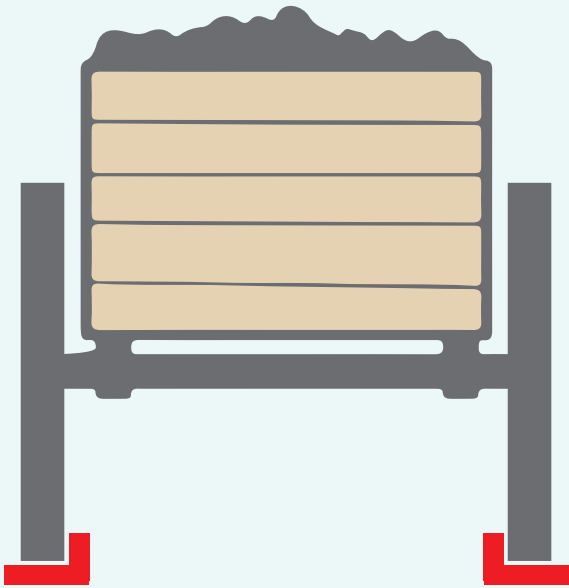
A block of wood is stopping these wheels from moving.



A wooden pole prevents this wagon from rolling back down the track.

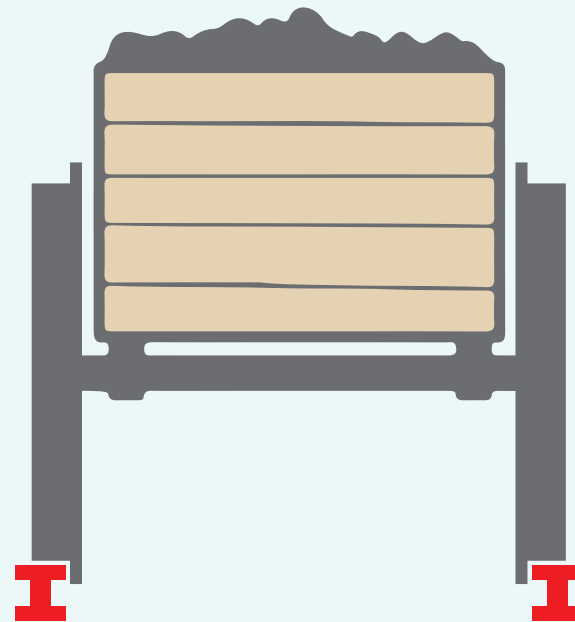
Two early railway designs

The L Plate



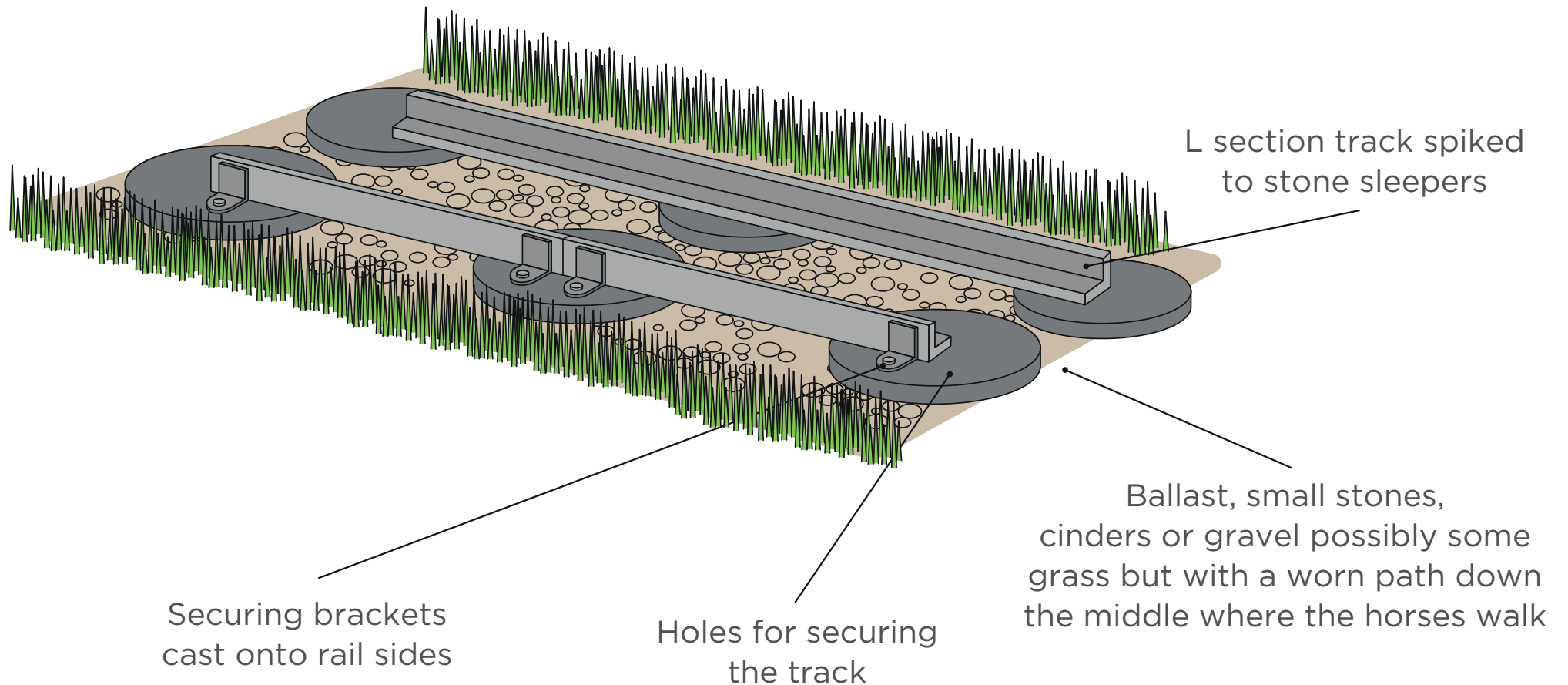
The flange is on the rail.

The edge rail

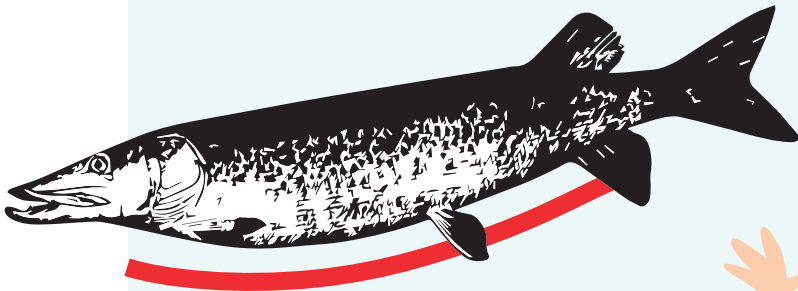
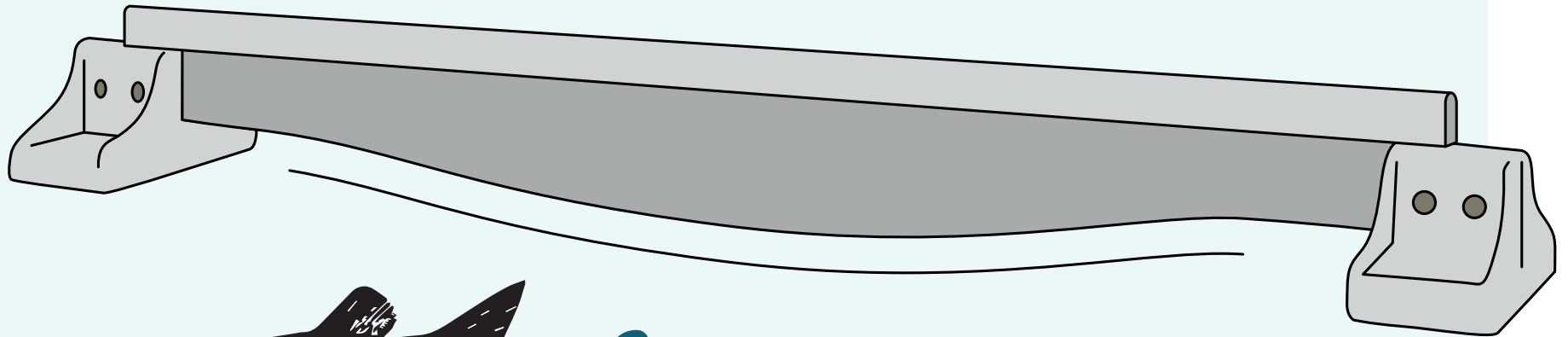


The flange is on the wheel.

L plate rails



Fish-bellied edge rails



Amazing!

The shape of the fish's belly is the same as the rail!

What the early railway looked like

