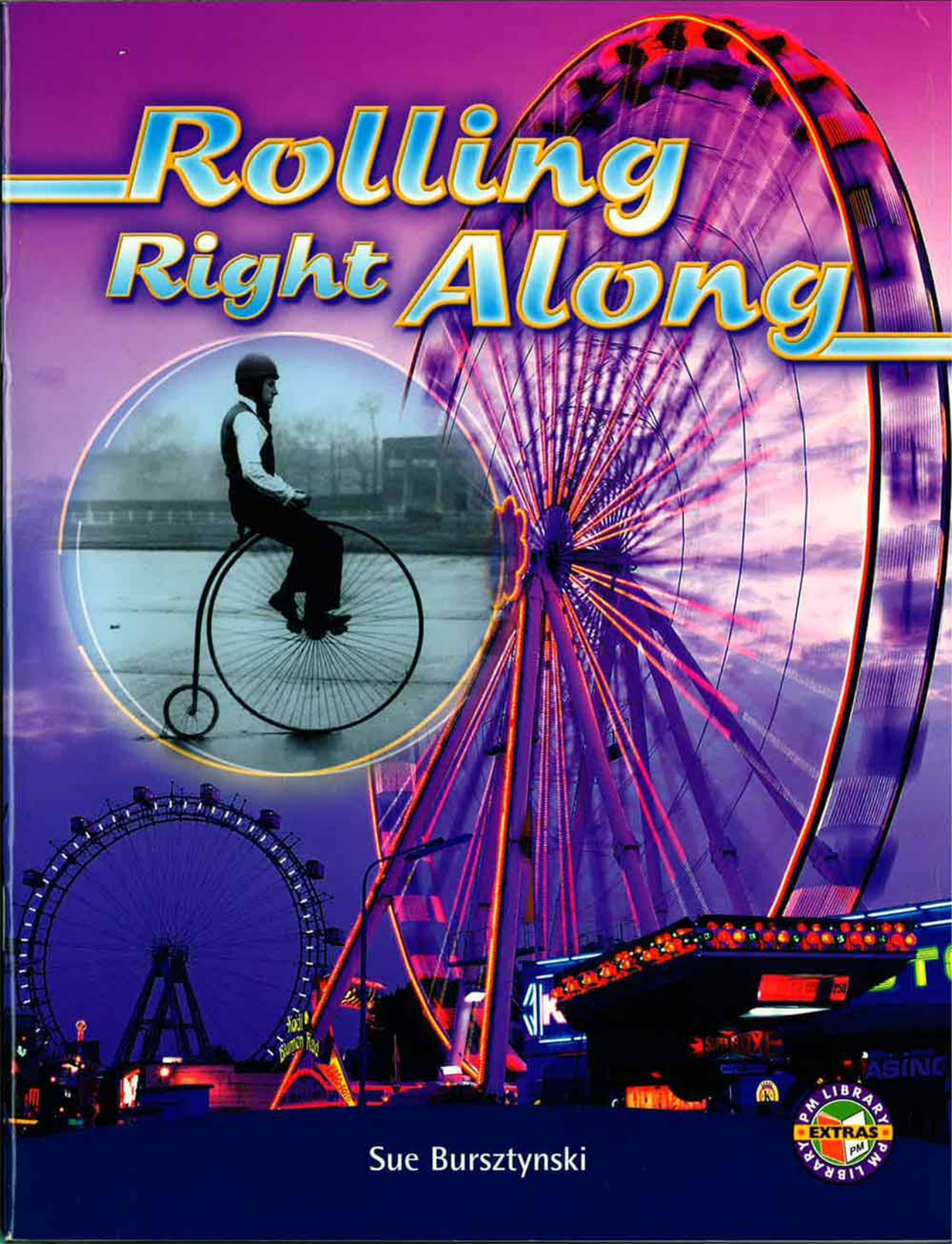
Rolling Right Along



Sue Bursztynski

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Rolling Right Along

Key vocabulary

chariot, circumference, diameter, Eiffel Tower, horsepower, hydro-electric plant, Middle Ages, rickshaw, turbine, turntable

Grammatical conventions

- Possessive apostrophe: Ferris's, Columbus's, world's
- Hyphenated words: spinning-wheels, fairy-tales, bicycle-powered, kick-wheel, merry-go-round
- Inverted commas: 'boneshaker', 'hobbyhorse', 'penny-farthing'

Spelling

- Compound words: battlefield, metalworking
- Suffixes: lighter, quickly
- Subject-specific vocabulary: penny-farthing, spinning jenny

Creative thinking task – Knowledge

Write an acrostic poem on the subject of 'The Wheel'.

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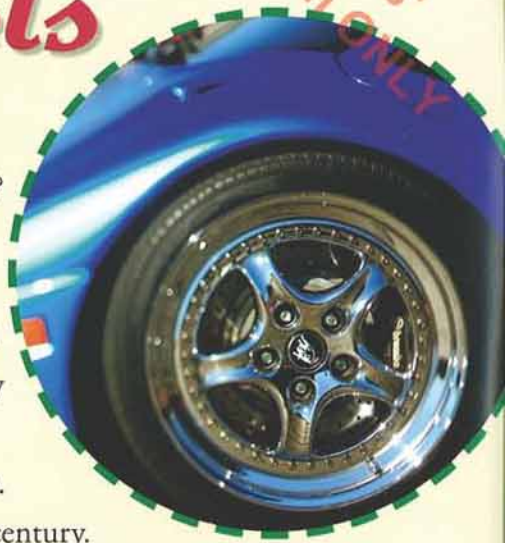
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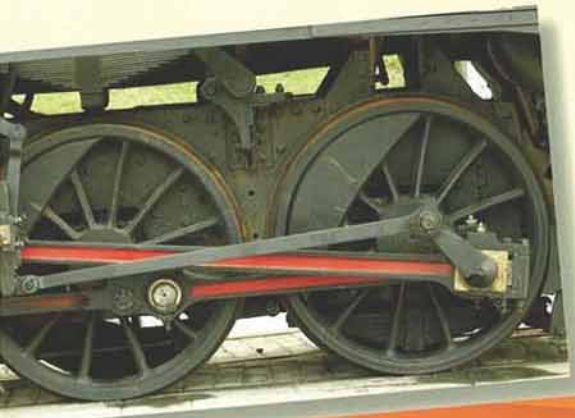


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Wheels within Wheels



When you hear the word 'wheel', what do you think of? Cars, bikes and other forms of transport? The wheel has played a very important part in the history of transport since it was invented in Mesopotamia in about 3500 BCE. It has made all the difference in being able to reach places quickly and has influenced what goods can be produced and sold. It even helped determine who won wars. Train wheels made a huge difference in the 19th century.

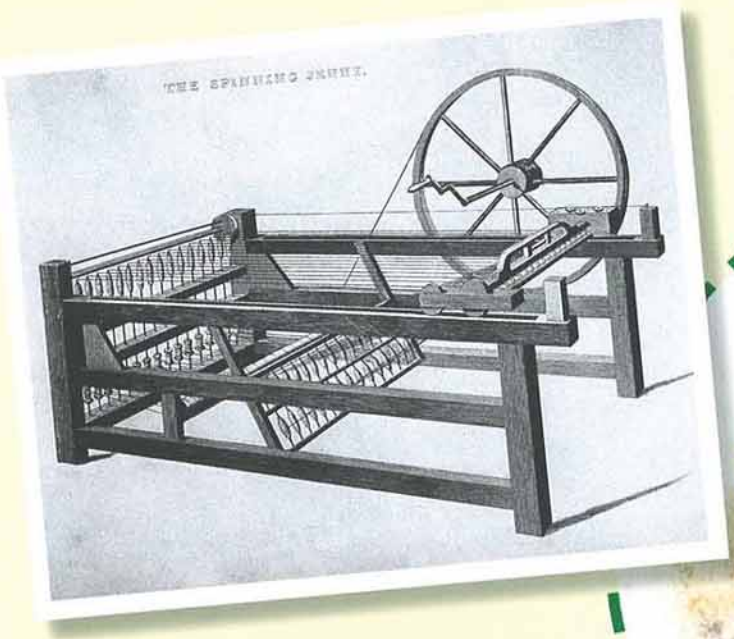


Did you know?

The South and Central American civilisations found that the wheel just wasn't practical and they managed well without it. The Egyptians had the wheel and they stopped using it when they decided that pack-carrying animals suited them better for transport.



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But the wheel means much more than transport. It has been a vital part of our lives for thousands of years. Improvements in the wheel helped people find new ways of doing things.

When more pottery was needed for bigger populations, for example, a quicker way was found to produce it – the pottery wheel. For centuries, women spun thread for cloth-weaving on sticks called spindles. When more thread was needed, the spinning-wheel came along, and it must have been a very important achievement: think of all the fairy-tales in which a spinning-wheel plays a part! An improvement in that wheel, the spinning jenny, completely changed the lifestyles of many country people, who had to go to town and work in factories.

Let's take a short tour through the history of this simple but important invention. Roll up, roll up!

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Chapter 1

Origins of the Wheel

Imagine a world with no wheels. There are no roads, and therefore no cars or even carts. No one turns pottery on a wheel or spins thread on a spinning-wheel. And then, one day, somone has a bright idea and the world is changed forever.

Letter to the King of Uruk

To Gilgamesh, Lord of Uruk, beloved of the gods,

Greetings!

As Your Majesty ordered, I have examined the new device, brought to the city market this morning by a farmer who used it to carry his goods for sale.

He calls it a 'cart' and the wooden discs which move it 'wheels'. As he explained to me, he had split a log, made planks and cut three slices for each 'wheel'. These are hammered together and attached to rods called 'axles', then pegs hold the wheels in place underneath the box. The wheels and axles turn and move the cart on its way, pulled by an ox. The farmer said the ox was already pulling his plough, so why not his cart?

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It is indeed impressive, Sire. The merchants to whom I spoke had no interest in the idea, since they have pack animals, but I believe we can make use of this idea in war, perhaps using swift donkeys rather than oxen. We would need to build artificial tracks on which to run them if we are to use them properly, but if the cart were lighter and some way could be devised to lighten the wheel, it would be highly effective. The warrior could shoot arrows or throw spears while a comrade drove the donkeys. It would also increase the speed with which our armies could travel, giving us a huge advantage over our enemies.

I am bringing the farmer and his cart to the palace to show you this afternoon, but will send this tablet ahead with a swift messenger.

Your Majesty's loyal servant,

General Enkidu

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Mesopotamian wheels

The wheel is thought to have been invented in Mesopotamia, in what is now Iraq, in about 3500 BCE. Unfortunately, wood doesn't last that long, so we don't have any original wheels left, but there are ancient pictures of Sumerian **chariots** with heavy-looking wooden wheels. There were solid disc wheels in Northern countries, but the Mesopotamian ones were made up of three pieces. Later, the heavy wooden wheels were replaced by lighter metal ones with spokes.

