



# MAGNUS GETS STUCK

## Who Discovered Magnets?

No one knows who first discovered magnets. The word *magnet* probably comes from Magnesia, a region in what is now the country of Turkey. Deposits of *lodestone*, a naturally magnetic form of magnetite, have been mined there since ancient times. There are several stories of how magnets were first discovered. This folk tale is one of those stories.

**M**agnus knew what that sound meant, and he did not like it.

*Baaa. Baaa.*

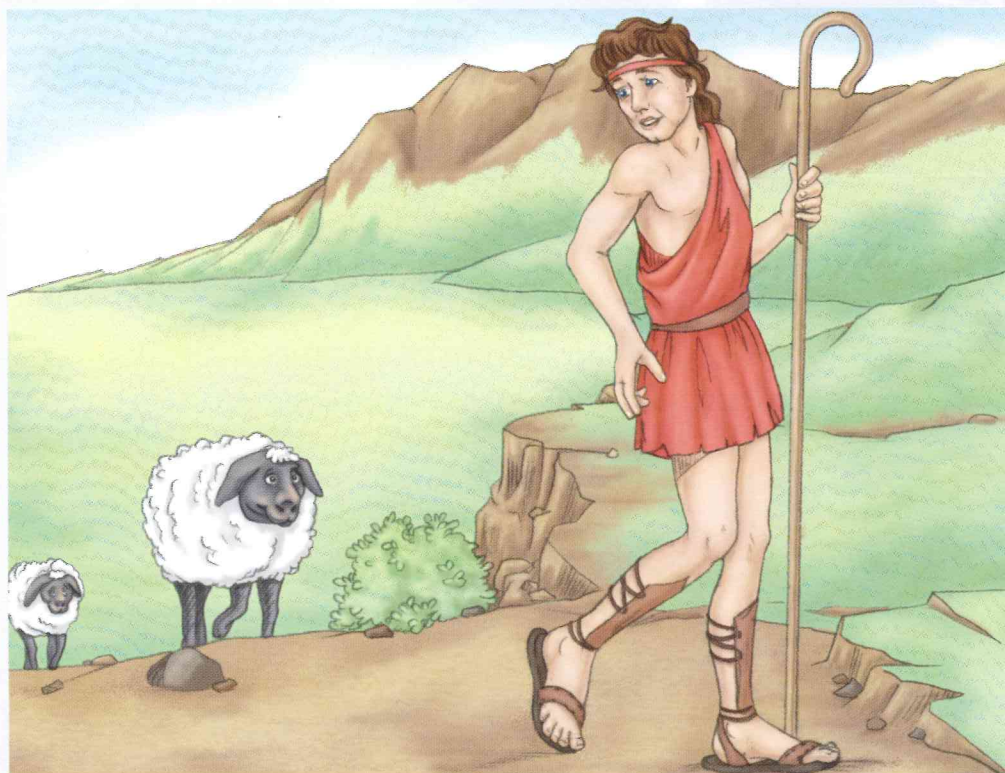
A lamb was caught in the rocks, and Magnus was the only one who could rescue it. Lambs were forever wandering away and getting stuck between the rocks.

"Oh, well," he thought. "I might as well get going before the lamb hurts itself."

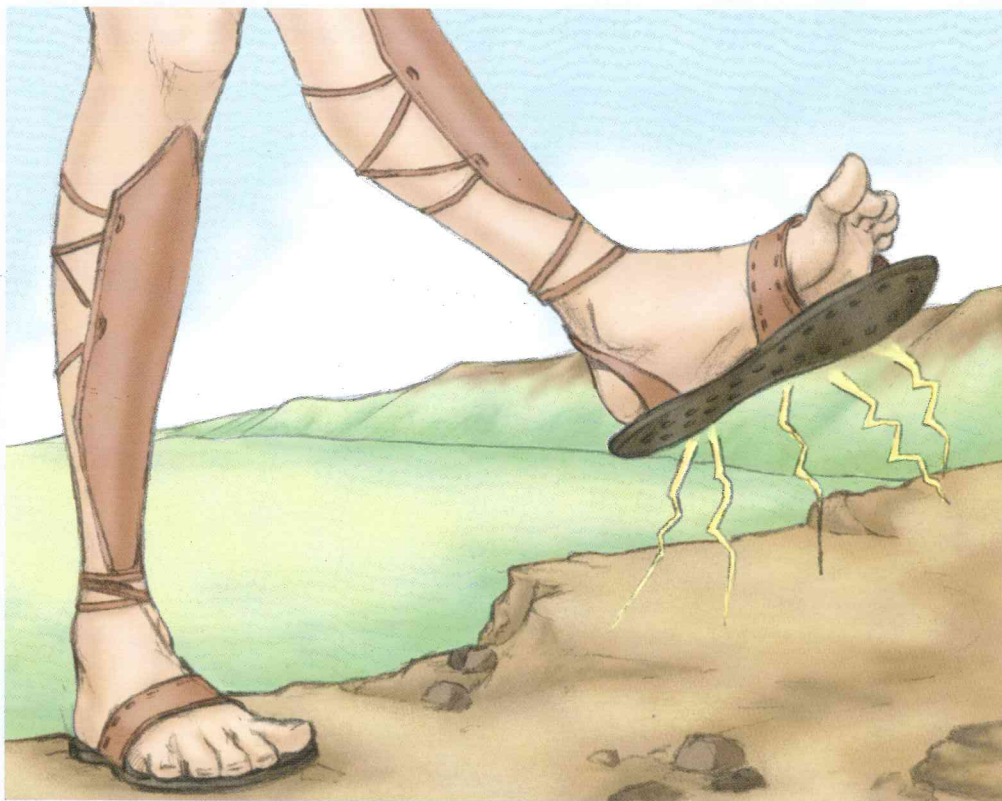
Magnus loved the mountains. The best thing about taking care of the herd was that there were always new places to explore. He had never been to this valley before. That always made him a little nervous. But it also excited him.

*Baaa. Baaa.*

The sound came from the other side of a large, dark rock. The rock was about twice as high as Magnus could reach, but he could easily climb over it.







"It will be a good test of my new sandals," he said to himself.

Magnus had saved all winter to get the sandals. He had spent everything he had earned selling wool in the market on the sandals. The large iron nails in the soles gave him extra traction on the mountainous terrain where he watched the herd of sheep.

Magnus held one foot up, looked at the large circles of iron on the soles of his sandals, and smiled. Then he leaped onto the rock and started climbing. "Don't worry, little lamb," he said aloud. "I'll be there in just a minute."

As he scrambled over the rocks, his new sandals gripped the surface even better than he had expected. In fact, each time he tried to lift up his feet, they stuck to the surface of the rock. Magnus stopped in disgust.

"I must have stepped in something sticky," he said to himself. "I hope I haven't ruined my new sandals!"

Magnus looked at the bottom of one sandal. The sole was clean. He touched it. It wasn't sticky at all. He tried the other foot. The result was the same. But when he tried to lift his feet from the rock, they definitely stuck.



He bent over to touch the rock's surface. "It feels normal," he exclaimed. "What could be causing my sandals to stick?"

Magnus took off one sandal and put his foot down in the exact spot where it had been. The surface of the rock felt warm from the sun. It felt just like thousands of other rocks he had touched.

When he lifted his foot, it came away without sticking. Puzzled, he reached over to put his sandal back on. He had to tug to get it loose from the rock. "This rock loves my sandals as much as I do," he thought.

As he bent to lace the sandal, a small iron tool fell from his pocket. *Clank*. The tool landed next to his foot. Magnus reached out to pick it up absent-mindedly. The tool stuck to the rock also!

Magnus tugged a bit harder, and the tool came free in his hand. He looked at the tool. Then he looked at the soles of his sandals. Both were made of iron.

Magnus smiled as he climbed down from the strange rock. He picked up his spear and laid its metal tip against the rock. It stuck just like the other iron objects. "This is incredible!" cried Magnus.



## What Magnus Discovered



The rock to which Magnus's sandals stuck was a special kind of magnetite called *lodestone*.

It is found in many parts of the world, including the United States.

Lodestone is a natural magnet. Like all magnets, it attracts objects made of iron or other metals like steel that are made from iron.



For the rest of the afternoon, he experimented with the rock. It attracted anything made of iron. He chipped off a piece of the rock. That also stuck to the iron objects.

"People in the village will be amazed," he thought. "I wonder what this rock is called."

*Baaa. Baaa.*

Magnus jumped to his feet. He raced over the rock and pulled the lamb from a large crack.

"It's lucky you're not made of iron," Magnus said to the lamb. "I never would have pulled you free." The lamb scampered back to the herd as Magnus gathered up some of the new rocks to take back to his village.

Many years later, Magnus told the story of how he first discovered the amazing rock. By then, many people knew of the rock's unusual power to attract iron. A traveler from the far-off land of Magnesia told of similar rocks. He called them *magnets* because they came from Magnesia. But the people of Magnus's village knew they were really named after the shepherd boy who first discovered them.

## Where Is Magnetite Found in the U.S.?

