

Invention Gives People Lizard Legs

By Chris Bryant

A gravity-defying lizard inspired an invention called the Gekkomat. Three German designers came up with the idea. Markus Hampe, Gerald Winkler, and Barbara Romberg borrowed the design from the gecko, a subtropical lizard known for climbing.

In nature, the gecko lizard can climb walls and even walk across ceilings. Its toes work like little suction cups. Together, all the toes make a strong enough grip to walk on rough or smooth walls.

The invention uses friction and suction to grip walls. It can support as much as 1 ton.

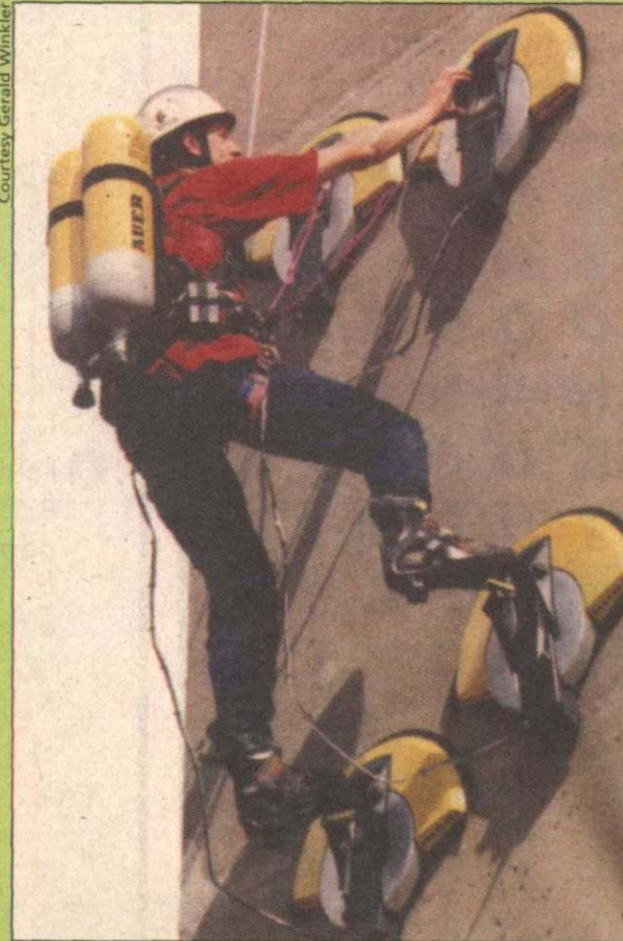
The Gekkomat uses four round discs connected to a tank of compressed air. The climber uses a disc for each hand and foot. When the disc is placed against the wall, the tank sucks the air out until the pad is secure. Many little suction cups are on each disc. All of them together make it possible for the climber to scale walls just like a gecko.

Similar inventions work only on very smooth surfaces, such as glass. The Gekkomat can be used on a variety of surfaces, including cement, brick walls, and even wood.

The inventors hope to sell the product to people who need to work on the sides of buildings or bridges. They also think people will like the invention just for fun.

Inventors often use nature as a guide when trying to solve problems. The famous artist and inventor Leonardo da Vinci filled his notebooks with sketches from the natural world. ▲

Courtesy Gerald Winkler



The Gekkomat has suction-cup grips that let people climb walls.