

## One Simple Device?

I'm getting very tired of how you take me for granted. I keep your pants closed and where they belong. All those mosquitoes buzzing around your tent? I keep them out! Remember when you dropped your backpack? None of your books fell out, all because of me.

People call me a simple device, but I rely on physics. I'm smarter than I look! My inventor called me a clasp locker when he created me in the late 1800s. The B. F. Goodrich Company gave me the snappier name, *zipper*, when they used me on some rubber boots in the early 1900s.

I actually have something in common with a doorstop. A doorstop is a wedge that holds a door open by exerting an upward force to the base of the door. I have teeth on either side of me, and each tooth has a hook on it, alternated with a hollow space. My zipper pull has wedges. When someone zips me up, the wedges exert the force that moves the teeth together. It sounds easy, but believe me, this takes precision. The teeth and hollow spots have to be the same size. The wedge and the teeth have to be at the right angle to properly apply the force. But if all of this works, I'm very strong when I'm zipped up.

See how impressive I am? Show me some respect!

