

Sticking Power

The inspiration for Velcro came from a walk in the woods

> It isn't often that an inventor can claim that his idea actually sprouted from a seed, but in the case of Velcro, that's exactly what happened. At least, that was Georges de Mestral's story—and he stuck to it.

It was 1941, and de Mestral, a Swiss electrical engineer, had gone hunting in the Alps with his dog. When he got home, he noticed that his clothing and the dog's fur were covered with small burrs—the seed-containing flower heads of the burdock, a member of the thistle family.

When the curious de Mestral examined the tenacious pods under a microscope, he discovered that they consisted of many dozen hooks that easily caught onto any surface containing loops. He theorized that if he could duplicate the hooks and loops, he could

succeed in making cotton strips that could be fastened together with the hook-and-loop technique. Through trial and error, he determined that nylon made an extremely strong material for the hook side of the fastener.

He named his new product Velcro, a combination of the French words *velours* (velvet) and *crochet* (hook). Years of refinement ensued, and 10 years after conceiving his idea, de Mestral applied for a patent in Switzerland. Before long, he had obtained patents in seven European countries and Canada. Today, there are dozens of trademarked variations of the Velcro fastener.

In 1958, after de Mestral opened a manufacturing plant in

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produce materials with a strong, though not permanent, bond. He imagined the new device as a fastener for clothing—in much the same way that his ancestors had used burrs to keep their coats wrapped tightly on blustery days.

After some initial discouragement, de Mestral found a weaver in Lyon who

New Hampshire, financial columnist Sylvia Porter introduced the product to the American public, describing it as a “zipperless zipper.” Although de Mestral expected Velcro to be immediately embraced by American consumers, it saw limited use in everyday products until the early 1960s.



The aerospace industry was the first to recognize the usefulness of Velcro for getting in and out of bulky garments, such as space suits. Ski and scuba enthusiasts soon followed. By the mid-1960s, Velcro had gained a foothold in the fashion industry.

In the 60 years since its initial manufacture, Velcro has been used in clothing as a replacement for buttons, zippers and shoelaces. Its ease of use makes it ideal for individuals who have difficulty dressing themselves. Astronauts use Velcro to keep their dinner plates from floating away while in orbit (using nets to keep their food in place while they're eating). It has even been used to hold together a human heart during cardiac surgery.

Not bad for an idea that was unwittingly picked up on a walk in the woods. ■