

Copying the Creator: Velcro™ and the Cocklebur

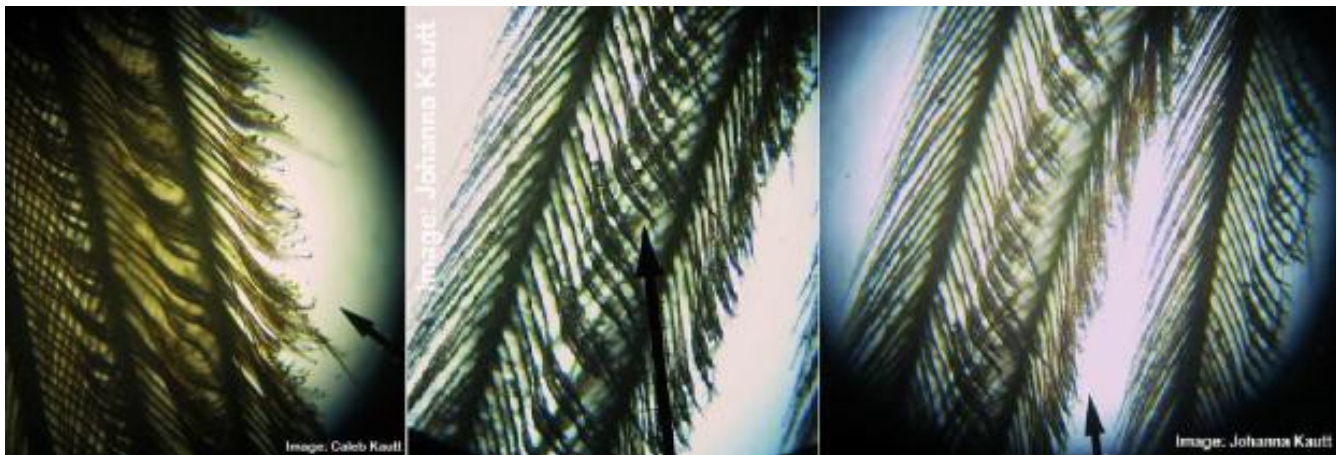
Velcro™ is something with which most of us are familiar. This product may be considered menial by some, but it has an intriguing history that most will find fascinating.

Mr. George de Mestral was a Swiss engineer and outdoorsman. While on a hunting trip in 1948 he noticed that dozens of burrs were sticking to his woolen clothing and to his dog's fur. Mr. de Mestral became curious as to how these burrs were sticking so effectively to his belongings. Upon examining the burrs under his microscope, Mr. de Mestral realized the secret to the burr's annoying stickiness. Hooks and barbs. Hundreds of them.

This discovery gave him a brilliant idea for an invention that he called Velcro™, which is from the French words for velvet (velour), and hook (crochet).

Mr. de Mestral's invention can be found in many places in our world, from the tops of your shoes, to the pack on your back, to the cable ties keeping the electric cords in your office neat. In fact, the National Aeronautics and Space Administration (NASA), in their now-defunct Space Shuttle program, used Velcro™ to strap electric equipment and wires to the interior of the Space Shuttle¹, and even Velcro™ strips inside of helmets² to give astronauts something to scratch their noses or chins on when they itched!^{3 4}

Remarkably, all flight feathers on birds have a similar hook and loop system that resembles Velcro™. Though feathers were not the original object from which the invention was *knowingly* copied, the system for hooking and looping God designed into feathers is far superior to that of Velcro™.



Barely visible in the images above, the hooks on the edges of the feathers connect with the loops on the opposing loops.

The fact that the airline pilot does not come over the intercom and say, “Please fasten your Velcro™,” is indication enough that this material has not proven itself to be a completely reliable form of strapping items in place. However, birds have been in existence since before man (Birds were created on Day 5 of Creation Week, Man on day 6 – see Genesis 1:20-28), and have been using the same “zipping” and “unzipping” of the hook and loop mechanism since God created them. Were the wings of a bird constructed from scales (some evolutionists have ridiculously suggested that feathers “evolved” from scales!), the weight of the wings would be too great for the bird to ever fly. However, God created the looping mechanism to combine the strength of each little filament, barb, and barbicle to be a light-weight, strong, and flexible vehicle for flight.

The connection between scales and feathers is naïve at best, and really disintegrates when a scale is compared under a microscope to a feather.

The supposed similarities are astoundingly absent. The scale is a rather simple formation of plates stacked upon one another, while the feather is a more complex array of shafts and filaments.

Feathers, burrs, and Velcro™ all point us back to the fact that man has copied his Creator, and God's design is still far superior.

Footnotes:

1 Schwarcz, Joseph A. (Oct. 2003). Dr. Joe & What You Didn't Know: 99 Fascinating Questions About the Chemistry of Everyday Life. Ecw Press. pp. 178. ISBN 1550225774. Retrieved 2008-05-09.

2 Ehow.com - http://www.ehow.com/info_8535076_velcro-uses-nasa.html

3 *Ibid.*, Schwarcz, Joseph A.

4 Strauss, Steven D. (Dec. 2001). The Big Idea: How Business Innovators Get Great Ideas to Market. Kaplan Business. pp. 15-pp.18. ISBN 0793148375. Retrieved 2008-05-09.