Ottawa man invents new twist on screwdrivers

Peter Kielland's Scruzol 'is simplicity at its best;' item picked up by Canadian Tire Corp.

BY ROBERT BOSTELAAR, THE OTTAWA CITIZENMARCH 14, 2010



Scruzol inventor Peter Kielland demonstrated his product at a new-ideas showcase organized by Canadian Tire Corp. The giant retailer liked the Scruzol so much, it put in an order for 15,000 units.

Photograph by: Julie Oliver, The Ottawa Citizen

OTTAWA — Since the arrival of the screwdriver in the 15th century as a decidedly late addition to the handtool world, people -- and by people we mean men, since women generally have more pressing tasks — have been trying to improve it.

We've reshaped the handle to make it grippier, and magnetized the blade to hold tiny screws that otherwise ping away and become lost in the carpet.

We've made screwdrivers that whirl with electric force, and devised interchangeable bits to match the ever growing array of screw types that manufacturers employ to confound us.

We've even given it names -- Robertson, after the square-socketed screw invented by Canadian P.L. Robertson, and Phillips, as in Henry F. Phillips, the American whose cruciform-headed screw became a world standard (not to be confused with the "standard" flat screwdriver) because of Robertson's reluctance to license his superior design to foreigners.

(And what about the Torx? Did this newcomer spring from the mischievous mind of The Monkees' alumnus Peter Tork?)

Soon we might find "Kielland" added to the great screwdriver directory. That's for Peter Kielland, who lives in Ottawa, but invents in Almonte, in a pine-planked office so close to the Mississippi Falls that condensation runs down the windows.

Kielland, however, would much prefer we call his creation by its trademark name, the Scruzol.

"You'll remember it," says the inventor, 59 and grey-bearded, but enthusiastic as a teenager. "Like Sawzall."

Catchy name aside, the Scruzol looks like your usual all-in-one screw-turner, with steel shaft and a slotted plastic handle holding extra bits. Two key features, though, give it a different twist.

One is the bit sockets at each end. Put a bit in the shaft and it's a regular screwdriver; chuck the shaft into a drill, put the bit into the opposing socket on the handle end and it's a power driver accessory. True, you could skip the Scruzol and just chuck the bit in the drill, but the presence of the accessory allows faster bit changes.

The other is the incorporation of a strong, rare-earth magnet that will draw a screw, even a line of screws, tight to the blade, and, better yet, keeps the extra bits snug in their slots -- even when the device is being spun by the drill -- while still allowing their removal with the flick of a fingernail.

"This," declares Kielland, "is simplicity at its best."

The most remarkable aspect, however, could be the success the Scruzol has already brought its developer. If you've watched the line of cash-strapped supplicants on CBC's Dragon's Den, you know how hard it is to turn a good idea into a viable business.

Kielland bypassed the Dragons (though he's not ruling out a future audition) and demonstrated his product at a new-ideas showcase organized by Canadian Tire Corp. The giant retailer liked the Scruzol and put in an order for 15,000 units, which Kielland had assembled by a Chinese manufacturer.

Canadian Tire sells the Scruzol for \$19.99 -- more than you might expect, perhaps, but in keeping with its high-grade ingredients (the bits are S2 steel, the best available), and a good price-point for, say, Father's Day shoppers.

"Canadian Tire was a big break," he says.

Kielland, though, is no new-product neophyte. A survey engineer, he worked for the federal Canadian Hydrographic Service for 21 years before taking a buyout in the 1990s to develop a pet idea: licence-plate recognition software.

Thirty patents but no actual device later, he sold the intellectual property for \$540,000.

Later he was part-owner of a machine shop that went bankrupt. What is it they say about failure as a teacher?

In four years developing the Scruzol, he sought no outside backing. His company, Visionary Technology, comprises Kielland and one full-time administrator.

He won't say how much he's invested, but does report he's already in the black, even as he prepares to meet a Dutch businessman about a possible European licensing deal.

"What I'm learning about now is marketing," he says. "They all die when it comes to marketing."

Yet if anyone could give the Scruzol some spin, it's Kielland, whose speech races like the runoff-swollen river outside as he enumerates the device's benefits: its small, put-it-in-a-pocket size, its magnetic ability to adhere to a refrigerator for storage.

In One Good Turn: A Natural History of the Screwdriver and the Screw, published in 2000, author Witold Rybczyski suggests toolmakers could have been the inspiration of E.M. Bataille to ask, "Is not invention the poetry of science?"

Poetry doesn't seem far away when Kielland says of the object at the heart of the Scruzol: "There's something magic about magnets. It's a force of nature. It's like gravity."

To himself, though, Peter Kielland is not a poet or Ron Popeil-style pitchman, but a guy who likes to dream and tinker and perhaps produce items that save time or energy or otherwise improve on what we have now.

He's already immersed in his next project, an electric-assist bicycle. Its twist? A movable handlebar that allows the rider to operate it like a conventional pedal bike or lean back, recumbent-style, to glide in comfort.

With the latest prototype in the hands of a machinist, he can already foresee the bicycle -- unlike the Scruzol -- being assembled in Canada. Maybe even Almonte.

This won't be called the Kielland either. It's the smartEbike.

But the family name already resides on a useful, even life-giving, tool, thanks to an ancestor, a Norwegian doctor. Though less used today, Kielland's Forceps are still employed in hospitals the world over to help draw reluctant babies into the world.

Peter Kielland has no intention of trying to improve on them.

© Copyright (c) The Ottawa Citizen