

The Pen Is Mightier Than the Lock

By **Lydia Polgreen**

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The cunning bicycle thieves of New York City always seem to be one step ahead of lockmakers. Design a more sophisticated lock and the thieves make a better pick. Make a sturdier chain and they get bigger bolt cutters. And if all else fails, they just dig up the parking meter or stop sign to unshackle the bike from it. But to open some of the toughest locks on the market, a thief needs only to flick his Bic pen.

Many cyclists erupted in disbelief and anger this week after videos were posted on the Internet showing how a few seconds of work could pick many of the most expensive and common U-shaped locks, including several models made by Kryptonite, the most recognized brand.

Mashing the empty barrel of a ballpoint pen into the cylindrical keyhole and turning it clockwise does the trick that has struck fear into the hearts of bicycle owners, especially those in New York, where thousands of bikes are stolen each year.

"There was murmuring on various Web sites, and so I decided to go home and pick up a pen and see if it works," said Benjamin Running, a graphic designer who lives in downtown Brooklyn. "Sure enough, within 30 seconds I had broken into my \$90 lock. I was in awe. My jaw literally dropped to the floor. It was so easy."

And many Internet users had the same reaction this week when they saw the homemade video he posted on his blog of his Kryptonite NY Chain popping open.

The problem could have wider consequences. Lock experts said the fault was with a particular type of cylindrical lock that is used not just in bike locks but in vending machines, cable locks for laptop computers, alarm system panels and countless other places.

Not all such locks are vulnerable, because some are built with more sophistication. Older Kryptonite locks made before 2002 appear to be less susceptible, according to bike shops that have tried to use the technique on them.

But this type of mechanism is used on most of the bicycle locks that are used by millions of people around the country, not just those made by Kryptonite (although the company said yesterday that a new and better model was on the way).

As the news spread, bicycle shops across the nation pulled the locks off their shelves and cyclists left their bikes at home, wondering if anything could keep their wheels safe.

"You would think for \$80 for a bike lock it would be secure," said Marc Weber Tobias, an investigative lawyer and security expert, whose Web site, security.org, has posted warnings about the flaws of cylindrical locks like the ones used in U-locks. "But this doesn't surprise me at all."

The trick works because the pen has the right diameter and is rigid enough to hold its general shape but pliable enough to mold into a sort of key that opens the lock. Mr. Tobias said the vulnerability of such locks was well known in security circles.

"These are cheaply manufactured locks with serious design flaws," he said. "You can't possibly think your bike is safe with one of these locks."

The uproar appears to have started on Sunday, when Chris Brennan, a cyclist in San Francisco, posted an urgent message on the bikeforums.net bulletin board after he was able to pop open his lock with a pen.

Like many people, he had been skeptical, but doubts were quickly dispelled when users like Mr. Running started posting digital video clips of the trick. By yesterday, 125,000 people had downloaded it from, his site, thirddrate.com, he said. Meanwhile, nearly 170,000 had seen Mr. Brennan's posting, starting a full-fledged panic.

"We are especially concerned because we thought these were the best," said Noah Budnick, projects director at Transportation Alternatives, an advocacy group representing bicyclists in New York City. "Our members get a discount on these locks. What is really shocking is the casualness with which someone could steal a bike with one of these locks on it."

Kryptonite, which is based in Canton, Mass., and was bought by Ingersoll-Rand in 2001, is named for the only material that can defeat Superman. The company has been making locks since the 1970's and is recognized by most bicycle shops as the leading lockmaker.

It is so confident in the security of its locks that if a bicycle is stolen by someone who broke the lock, Kryptonite will pay up to \$3,500 to replace the bike, depending on the model of lock, though there are several caveats to the policy. Bike shops in New York City overwhelmingly recommend the company's locks, particularly the four locks that are designed specifically for New York riders.

In a statement sent by e-mail yesterday, the company said that it was aware of the problem and was moving quickly to get locks featuring a different mechanism to bike shops and that it was designing a program to let users of compromised locks to upgrade to new ones.

Donna M. Tocci, a spokeswoman for the company, stressed that locks made by other manufacturers shared the same vulnerabilities.

Cyclists across the city marveled at how easy it was to crack their locks. With a little practice, opening a Kryptonite with a Bic barrel takes as little time as using a key, said Arone Dyer, a mechanic at Bicycle Habitat in SoHo. She produced the white plastic barrel of a Bic pen from her pocket along with a Kryptonite brand lock and provided a demonstration. In less than five seconds, the shackle popped and slid open.

"It is that easy," Ms. Dyer said.

The NY Chain lock, the product most shops recommend for city cyclists, consists of a heavy chain and small U-shaped lock. It weighs about six pounds, so heavy that many riders wear it slung around their waists. The chain is made of squared links of hardened steel that is impossible to cut by hand, so that part of the lock is still sound.

Bike shops are recommending that customers replace the small U-lock with a sturdy padlock, like the ones that bodegas use to secure their roll-down gates. These padlocks cost less than \$20 at most hardware stores.

In addition, Kryptonite has a line of locks that feature flat keys; Transportation Alternatives recommended that its members buy one of those.

The group's Mr. Budnick said that most bike thefts could be prevented if only office buildings allowed people to bring their bicycles indoors, but few do. A bill requiring buildings to allow bikes inside was introduced by City Councilman David Yassky but has been stuck in the Housing and Buildings Committee.

Will Wood, whose Spokes and Strings shop in Williamsburg caters to the commuter market, said he was warning anyone who would listen.

"I feel like a Cassandra, but for years I have said to my customers, 'This is the industry standard, and this will keep your bike safe,'" Mr. Wood said. "Now I tell everyone who comes in, 'Tell your friends before the thieves tell theirs.'"