## THE PUZZLE DISSECTOR: ERIC FULLER

By Nancy Ray Taylor & Tom Cutrofello

ric Fuller, a master creator of precision puzzles, is held in high regard by serious puzzle collectors from all over the world. Fuller, who is based in Raleigh, North Carolina, is one of the very few puzzlemakers who are tapping into the vast warehouse/database of puzzle design, to which designers are constantly submitting ever more complicated brainteasers. "Eric is one of those guys who has a terrific knack for spotting interesting, fun puzzles from other designers and then bringing them to life, beautifully," says Allard Walker, a collector and avid fan from England. "His standards are sublime and brilliant. When he describes the fit as good, it's jolly perfect, and stays that way."

Fuller's foray into the puzzle world was by happenstance. "I'm a night owl," he says, when asked how he got started. "In 2002, I was up late browsing on eBay. I saw a 27-move Yosegi puzzle box and it looked interesting. I ordered it, and once it arrived it was all over! I was captivated by the mechanism and craftsmanship."

Yosegi puzzles, which originated in Japan, are typically secret opening boxes, with inge-

nious opening mechanisms. But the intricate wood patterns on the exterior of these handcrafted objects are mesmerizing in their own right. Fuller's first impression was to ask how this was possible. Instantly intrigued, he started collecting every puzzle he could get his hands on. Back then, collectors were limited either to a small selection of poorquality imports or to an even smaller selection of high-end work by by people like Tom Lensch, Wayne Daniel, and Lee Krasnow. These gentlemen are considered among the most elite ranks of American puzzlemakers for their outstanding craftsmanship. Simply trying to acquire one of their puzzles is not easy. The first step is to get an invitation to the super secret International Puzzle Party. Then it'd help to win the lottery so that you can afford these puzzle gems.

Back then, Fuller was far removed from the world of puzzles. "At the time, I was in the computer field running infrastructure for a medium-size company in San Diego," he recalls. "I spent about 7 or 8 months as a pure collector, then one day ran across a blog that described how you could make burr puzzles with a handsaw. It seemed doable.

I went to Home Depot, set up my new tools on my kitchen table. Shortly I had made my first puzzle. It was rough, inaccurate, and ugly...but it worked!"

It was a transformative moment, one that Fuller remembers vividly: "I was hooked, but now in a new direction. Making puzzles gave me ten times the thrill that solving them gave. Almost immediately, I moved out of my apartment and into a place with a garage where I could build a workshop and started woodworking in earnest with every spare moment. Soon I started turning out some decent work."

After Fuller's relocation to North Carolina, he started making puzzles full-time. Rob Jones, a puzzle collector who owns many of Fuller's creations, appreciates his work on many levels. "Eric's vast body of work demonstrates his insatiable enthusiasm for puzzle design and his boundless passion for sharing his favorites with the world," he says. At the same time, he adds, "Eric is one of the very few puzzle artists with a distinctive voice. He cherishes wood and brings a masterful sensibility to making choices, offering beauty to the eye and warmth to the touch."



Curious to learn more about Fuller's puzzles? Many of them are available at his website, www.cubicdissection.com. Here are nine of Fuller's personal favorites, all guaranteed to deliver great "aha" moments.

1. THE SMALL BUTTON BOX: Fuller thought about what a button does and what assumptions everyone has about them. Then he took all of those ideas and turned them on their head, making a box that looks simple but does nothing you'd expect it to. Fuller won't go into any more detail, though. "I don't want to steal that moment we all live for in the puzzling world!" he teases.

2. THE CARTESIAN WALLET, an elegant folding puzzle that was originally designed

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by Akio Yamamoto. It never fails to garner remarks when Fuller takes it out of his pocket.

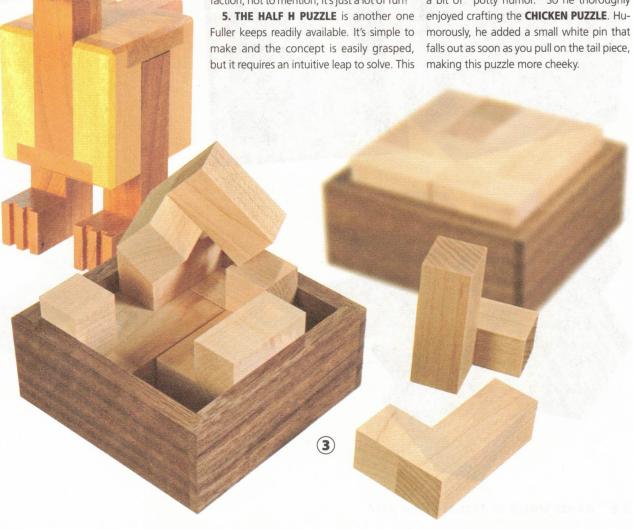
3. PACK SIX was the first puzzle Fuller ever designed. It has provided hours of amazement. When Fuller created the Pack Six, he knew essentially nothing about puzzle design. Stumbling upon a set of pieces that was easy enough for non-puzzlers to enjoy solving yet challenging enough for veterans to sink their teeth into made it well worth the time he spent learning puzzle design. And while most of his work is limited in release, this is one Fuller says he will always try to have in stock.

4. OSKAR'S MATCHBOXES is another puzzle that beginners and experts alike thoroughly enjoy. The concept of this ingenious puzzle is in the motion of the pieces. Simply slide all the matchboxes into their lids. Fuller says: "When I applied precision joinery on such a small scale, it gave me so much satisfaction, not to mention, it's just a lot of fun!" puzzle is a great example of the way Fuller takes solvers' assumptions and uses them in creative ways. According to Fuller, the look on people's faces when they get it is priceless.

6. THE IRMO BOX, which won first prize at the 2008 Puzzle Design Competition, is still a favorite. It uses either inertia or momentum to open, depending on whether the solver is right- or left-handed. According to Fuller, it's the first puzzle that made him feel like the techniques he'd developed were resulting in a recognizable style of work.

7. THE CUBANE PUZZLE, first designed by Masumi Ohno, was a wonderful puzzle from the start, despite being difficult to make. The prototypes broke a lot, and there was no clear indication of the starting point. Fuller was able to resolve those conflicts with his interpretation of Ohno's puzzle and proudly states that he improved the design to make it work.

8. At times, Fuller admits, he indulges in a bit of "potty humor." So he thoroughly



**9.** Fuller's all-time favorite puzzle is **SLIDEWAYS** by Ray Stanton. Its shape, the three identical pieces, and the way they move, is so unexpected. Slideways is a standby on Fuller's website and sells for a reasonable price.

Fuller does not claim to be the best puzzlemaker, nor does he imagine his work competes with the world's finest puzzlemakers, like Lee Krasnow and Kagen Sound. Instead, he strives to make fine puzzles at an affordable price. As a master craftsman, he would describe his form of art as identifying the point of diminishing returns.

Daniel Scher, an avid collector of Fuller's work, sums it up nicely: "His creations are eye candy for lovers of wooden puzzles, but it's the tactile luxury of handling them that brings me the most pleasure. Even if I throw up my hands in defeat at that tricky burr, puzzle box, or maze, I happily continue to manipulate these wooden creations for hours, to experience

the gratifying movements that Eric has lovingly engineered in each puzzle."



(6)