

Metagrobolizers of Wire

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Many people love the challenge of solving a good puzzle. In fact, those who like puzzles generally like to solve just about any problem. Be it a paradox, a mathematical problem, magic, or a puzzle, the search for answers drives many of us on. Unlike magic or illusions with misdirection and hidden mechanisms, mechanical puzzles are an open book, with everything visible, all parts exposed ready for minute examination and scrutiny. In spite of this, the solutions can elude even the sharpest and quickest minds of every discipline.

Puzzles can go beyond an understanding of the problem and its solution, and here is where the separation between the common puzzler and (to borrow a phrase from Nob Yoshigahara) a “certifiable puzzle crazy” lies. The majority of mechanical puzzle solvers take the puzzle apart through a series of random moves with no thought given to the fact that this way they have only half-solved the problem. The random-move method will suffice for easy to medium puzzles but will do little or no good for solving the more difficult ones. A “puzzle crazy,” on the other hand, will analyze the problem with logic and stratagem, then reason out the solution to include returning the parts to their original starting position. Regardless of one’s ability to solve them, puzzles entertain, mystify and educate, and the search for puzzling challenges will undoubtedly continue.

My own interest in puzzles began in early childhood, with the small packaged and manufactured wire puzzles available at the local 5 & 10-cents store. Although entertaining, they were never quite enough of a challenge to satisfy my hunger. Somewhere in the back of my mind I knew I could come up with better puzzles than were currently and commercially available. About twenty years after my introduction to those first little wire teasers, a back injury from an auto accident and lots of encouragement from puzzle collectors brought the following and many other puzzle ideas to fruition.

Wire disentanglement puzzles are topological in nature and can vary widely in both difficulty and complexity of design. Wire lends itself very easily to topological problems because of its inherent nature to be readily

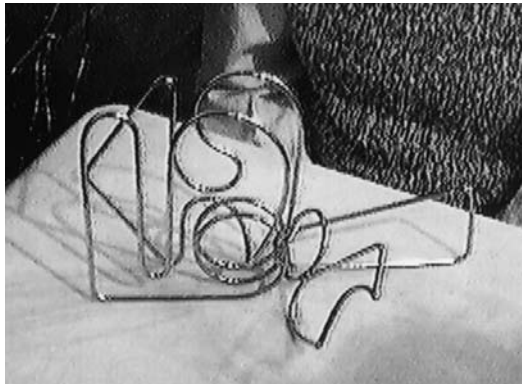
and easily formed into whatever permanent shapes may be necessary to present a concept.

I am frequently asked to explain the thought process involved in coming up with a new puzzle. Unfortunately, I really can't answer. I neither know or understand the process of any creativity than to say that it just happens. It is my suspicion that the subconscious mind is constantly at work attempting to fit pieces of countless puzzles together; sometimes it succeeds! If you devote your mind to something, either you become good at it or you are devoting your mind to the wrong thing. A couple of examples of ideas that have "popped" out of my mind at various times are explained and illustrated below.

Many thanks must go to Martin Gardner as an inspiration to the millions enlightened by his myriad works. Thanks also to Tom Rodgers for his support of my work, for asking me to participate in "Puzzles: Beyond the Borders of the Mind," and for presenting me with the opportunity to meet Martin Gardner.

The Bermuda Triangle Puzzle

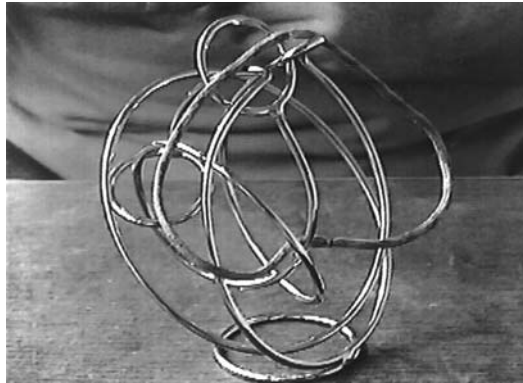
Knowing the fascination that many people have with the somewhat mysterious and as-yet-unexplained disappearances of various airplanes and ships in the area known as the Bermuda Triangle and the Devil's Triangle made naming this puzzle relatively easy. Often it is easier to come up with and develop a new puzzle idea than to give it a good and catchy name. This puzzle idea came to me as I was driving to San Francisco to sell my puzzles at Fisherman's Wharf, in 1971 or 1972.



The Bermuda Triangle Puzzle

The object of the Bermuda Triangle is to save the UFO that is trapped in the puzzle, the UFO being a ring with an abstract shape mated to it. The puzzle is generally set up with the ring around the Bermuda Triangle, which is a triangular piece. The triangle can be moved over the entirety of the larger configuration, taking the UFO with it as it moves. There are several places where the UFO may be separated from the triangle but only one place where the separation will allow the solution to be executed. Most of the large configuration to which the triangle is attached is there simply to bewilder the would-be solver. The solutions to many puzzles can be elusive until the puzzle has been manipulated many times; although moderately difficult for the average puzzler to solve initially, this one is relatively easy to remember once the solution has been seen. The Bermuda Triangle rates about a medium level of difficulty.

The Nightmare Puzzle



The Nightmare Puzzle

The Nightmare puzzle was conceived as Johnny Carson was delivering his monologue during the Tonight Show one night in 1984. As with most of my puzzle ideas, this one came to me fully formed and complete. I keep tools and wire handy for just such events having learned that three-dimensional ideas are difficult to decipher and duplicate from two-dimensional scribbling on a piece of paper. After making the prototype, as I sat playing with it, my wife joined me in critiquing my latest design. Sometime later one of us stated that we probably would have nightmares about it that night. We didn't have any nightmares about it, but the name stuck. The Nightmare

has more than lived up to its name with a convoluted three-dimensional shape that exacts extreme effort and concentration from all who attempt it.

The Nightmare puzzle is made from one continuous strand of wire. There are two outer and two inner loops, with the wire ends making small rings that are wrapped around the wire in such a manner as to eliminate any usable ends. A cord encircles the two inner loops of the puzzle, and the object is to remove the cord completely from the puzzle. In addition to the difficulty in conceptualizing the convoluted shape of the puzzle, the flexibility of the cord allows one to make mistakes not possible with rigid pieces. Any wrong moves, not promptly corrected, quickly compound into a tangled mass of knots soon precluding any progression toward the solution. On a scale of 1 to 10, I rate the Nightmare an 8. The difficulty may be increased by, after the cord is removed, adding a ring to the cord that will not pass through either of the small end rings then attempting to replace the cord.