Mechanics and motion have always fascinated me. During college I studied physics, engineering and chemistry to further my understanding of how things worked. I graduated with a degree in physics from Boston University in 1974. This intuitive understanding of motion and mechanics combined with the artistic influences of my wife, Marji, led me to the creation of kinetic sculptures. In 1975 we started “Wood That Works” and I became a full time sculptor. Since then I have designed and handcrafted over 100 different limited edition and one-of-a-kind kinetic sculptures. I have exhibited in numerous juried, invitational and group events. My work is displayed in galleries and private collections around the world. I currently maintain a studio in rural northeastern Connecticut.
Hello,

Welcome to the world of Wood That Works. This Tri-Fusion is number ____ out of a possible 150 pieces. It was made by me during the month of ______________ in 2009. I build, test and pack each sculpture myself, doing 6-12 pieces of an edition per month. It takes several years for me to complete an edition and some are never finished as I move on to new designs. Designing and building kinetic sculptures like Tri-Fusion has been my full time occupation for more than 20 years. I hope Tri-Fusion brings you and other viewers as much enjoyment as I've found in making it.

Tri-Fusion has been mounted on a wall in my shop and running for at least 2 complete windings (several hours) before I pack it. I make every effort in design, construction and packing to make sure the piece will perform problem free for years to come. I use only the finest materials.

It leaves me happy and satisfied to find that my work has made it's way into new lives. I hope it brings you years of enjoyment.

David C. Roy
Directions:

To Wind
• Turn the winding wheel counter-clockwise 20 turns.
• Pay close attention to the top of the light colored wood spool directly behind the winding wheel. Stop winding as soon as you see the red tape appear on the metal band. This is placed about 1 turn from the end. Winding beyond this point may damage the sculpture.

To Start
• Gently push down on whichever arm is in the upper most position.

Guarantee
• Defects in workmanship and materials are unconditionally guaranteed. I will repair the sculpture without charge if it is returned post paid. After the first year there will be return packing and shipping charges.
• I will charge a reasonable repair fee if the sculpture was damaged by misuse or needs refurbishment from normal wear and tear.

About Tri-Fusion:

Tri-Fusion was inspired by a collector who asked what would happen if I made Fusion with 3 patterning wheels. It seemed like an interesting idea so I worked up a computer animation to test it. I liked what I saw, especially the patterns created by the small crescent wheels. I decided to stain these dark to make the patterns stand out while being enveloped by the lighter colored ellipse shaped wheels. It was a new patterning effect and one that I liked.

Step two in the design process was to design a mechanism to sustain the motion. I tried using a new escapement I’ve been working on but it really didn’t create the correct motion unless I added a lot of complexity. I finally settled on my very reliable two arm and pinwheel mechanism. It is relatively simple and efficient but best of all created the correct motion.

Specifications:

Limited Edition of 150
Size: 44"h x 34"w x 10"d
Power Source: negator spring
Approximate Run Time: 5 hours
Materials: hardwood plywood, bearings, string
Tri-Fusion ©2004
Patent No. 4637152
Directions:

To Mount on Wall:
- DO NOT remove the tape holding the strings in place
- Hold the backboard in the desired location against the wall. Level the bottom edge.
- Place a sharp instrument through the screw holes, marking their positions on the wall.
- Drill pilot holes. If the wall is sheetrock or plaster use plastic anchors.
- Screw the sculpture to the wall.
- Remove the tape holding the strings in place.

Before Moving Sculpture:
- Always tape the spring-belts in place before moving the sculpture. This will save a lot of aggravation when it is time to set the piece up again.
- See the diagram for the best tape locations.
- Never lay the sculpture on a horizontal surface for a long period of time without supporting the spokes of the patterning wheels. I use crumpled newspaper to support and separate the wheels when packing the sculpture.