

Jill's puzzle box

Good morning, 7:54 a.m. Saturday, 20 January 2018

When I visited Blue Gate for the first time, Jill showed me the original puzzle box which inspired this year's production piece. I can't recall what year that was. It was winter, pre-Christmas. I took the train out and back from Denver and stayed in the basement room of the other house. Sean and I affected repairs to the old wood boiler and the high tunnel along with other projects.

I was very intrigued with the box and tried to understand the locking mechanisms and fabrication techniques. I chose a tactile process by pushing and prodding, shaking and listening – somewhat like a safe cracker feeling the tumblers fall. It was either that or dismantle the box to get to the innards, which was out of the question. When it was time to head back to Denver, Jill was kind enough to let me take the "treasured" box with me for further study. It had crossed my mind that a fluoroscope or X-ray would divulge the secrets yet did not follow up on that process.

Time ran out.

Paul visited Denver that Christmas and took the box back on his return trip. I headed back to Oz with pages of notes and sketches, hoping to solve the puzzle with more time. Needless to say, I never revisited the project and have misplaced my files and drawings.

I do recall some insights and conclusions from my short study:

Lock

1. The locking mechanisms are simple and durable.
2. The pivot point is a cam.
3. An elongated slot allows a sliding action.
4. A ball bearing or short rod is the actual lock, stopping the lateral movement when engaged by interfering with the direction of movement. Somehow it drops out of play, possibly into a cavity.
5. The coin helps to disguise the rattle sound of the loose "pin".

Fabrication

1. Tolerances for the lock and holding pin at the top need to be fairly snug. Small drill holes could be used to transfer location points between pieces.
2. Elongated slot can be made with a fret saw or router.
3. Any minor misalignment of the external of the box can be sanded to a smooth finish.
4. Making the box out of a single piece of wood can be done to present a continuous grain line and general pattern. More work and tooling needed.
5. Timber used should be kiln dried to at least 17% to restrict swelling and misalignment.
6. A good oil or lacquer finish on all parts is advised.

I imagine that Jill's box is not the first of its kind and is a reproduction of a very old puzzle box. A Google search might find construction plans.

JVS