

A Touch of Magic (& Monofilament) Rigging Falling – and Restoring – Books

“And that my friend is why I’m never allowed in Cook County without my state issued ID and an International Order of Odd Fellows ring.”

“I hate to interrupt such an interesting story,” Alex said, “But we just got an email from the stage manager. Looks like they want the stage right shelf over the computer to fall and then restore in a six-second blackout.” That’s the shelf with all the teaching books on it, yeah?, I ask. “I’m afraid so, and if it falls all the way down the weight will break the computer monitor on the desk below it.” Let’s noodle on this tonight and see what we can come up with, I conclude.

Alex mocked up a shelf the same size as the one on the set so we could try a few things out. Scenery took over the actual fall and restore of the shelf itself on the set just as long as we took over the falling and restoring of all the books on the shelf.

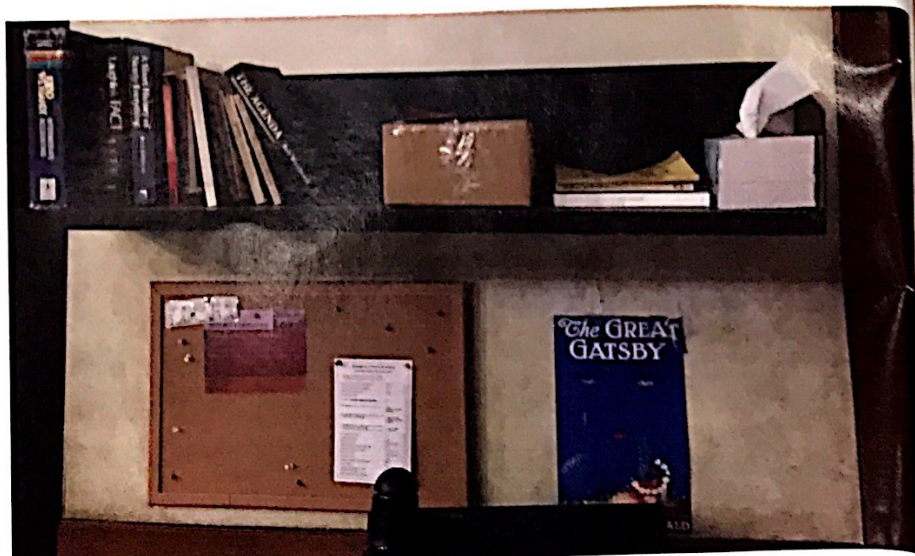
If At First...

The first books we tried were all foam core books, books whose inner pages were replaced with blue foam. We then drilled a 1/4" hole thru the books at the same height and depth from the back of the shelf. Approximately 6" up from the shelf and 3" out from the wall that the books would be up against. This would make sure that even if all the books were different sizes they would have the monofilament running thru them at the same place. This was so the books would sit naturally and not be forced to sit oddly because of the monofilament running thru them. In the last book we drilled thru the back cover and the pages but not the front of the book to hide the line.

The carpenters put a pivot on the downstage back of the shelf and a 2x4 stop block. We pulled out the pin and the upstage side of the shelf fell 9", but our books did not. A young intern carpenter working behind us said ‘Looks like it didn’t work; the books just stayed right there.’ Not wanting to be rude, Alex and I thanked him for his wisdom and insight.

Try Again

We scrapped the lightweight books for actual books, so they had



some weight to them. The foam core books just didn’t have enough mass to them and the monofilament just acted as an anchor holding the books in place. We also then replaced the monofilament with shark fishing line since it would be a lot stronger, as we now had heavier books. We made the book on the down stage end hollow so it could house a pulley and the books could be restored from behind the wall with one tug of the shark line.

Because of the weight, we put in a second hole an inch above the bottoms of the books that ran the length of the shelf. It worked as a tether to keep the books from falling off the front side of the shelf unit.

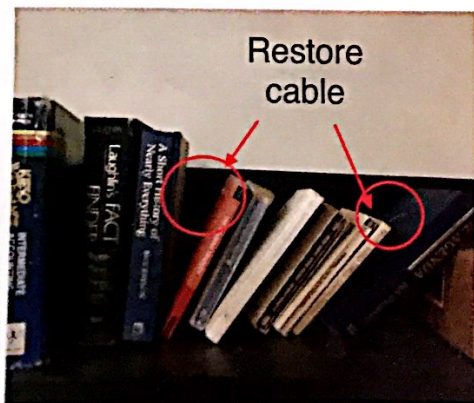
We then pulled the pin again and the shelf dropped and the books fell to the other side of the shelf. The lead carpenter pulled the lever that restored the shelf and replaced the pin. Then he tugged on the shark line wire pulling the books into place. And it worked pretty damn nicely. (See a video at bit.ly/sdAB1217)

We put 1/2" plywood backing onto a cork board to have it sit out from the wall to work as a stop for the shelf and removed the 2x4 stop block. It was great because it looked like the shelf landed on top of the monitor but didn’t touch it. It worked perfectly no problem at all.

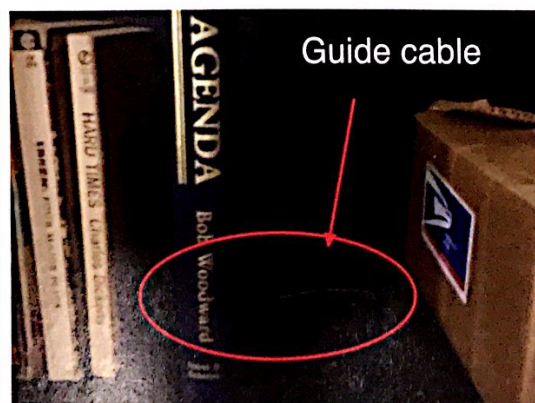
So, when we got to that moment in tech it worked perfectly. It did exactly what they wanted without complication. We had created a cool magic trick that was low tech and easy to work.

Now, I know it’s our job to do these things and make unexpected things happen, but I was kind of crestfallen that no one was impressed. There was no thank you from anyone for making this really cool thing happen. So, I looked at my phone to see if I could temporarily distract my mind when a hand hit my shoulder.

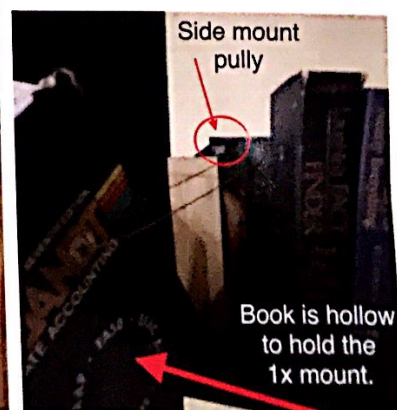
It was the young intern carpenter ‘Man, that was f*3kin cool how you guys made it all go back into place, like *Bewitched*.’ Thank you so much. ‘Can you tell me how you did that.’ I’d be more than happy to, but it will cost you a cup of coffee. Is that fair? ‘Deal.’



Restore cable



Guide cable



Side mount pulley

Book is hollow to hold the 1x mount.