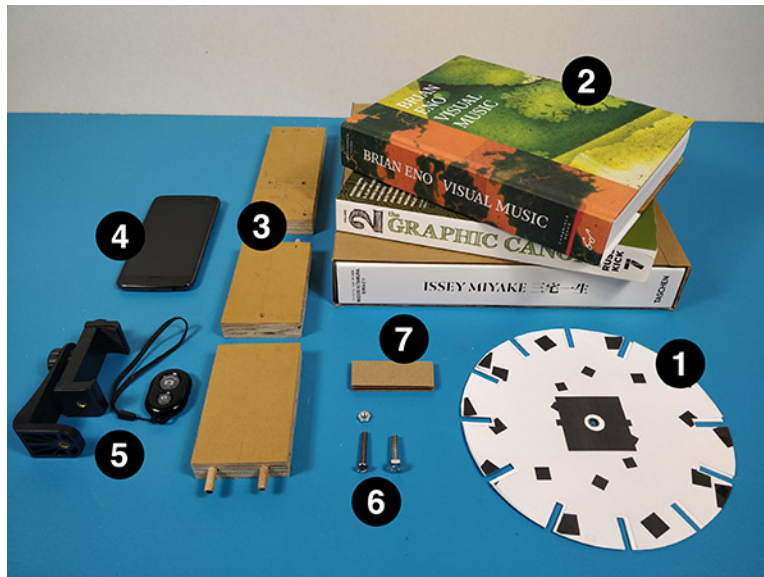


AD23300 Electronic Media Studio
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Phenakistoscope Stop-Frame Animation – Part 01

This workshop gives step-by-step instructions on how to re-use your AD23300 course kit and how take photos of your Phenakistoscope wheel, so we can experiment with them in Adobe Premiere – both, in a true stop-frame animation and in an animation that uses keyframes.

Here is what we need:



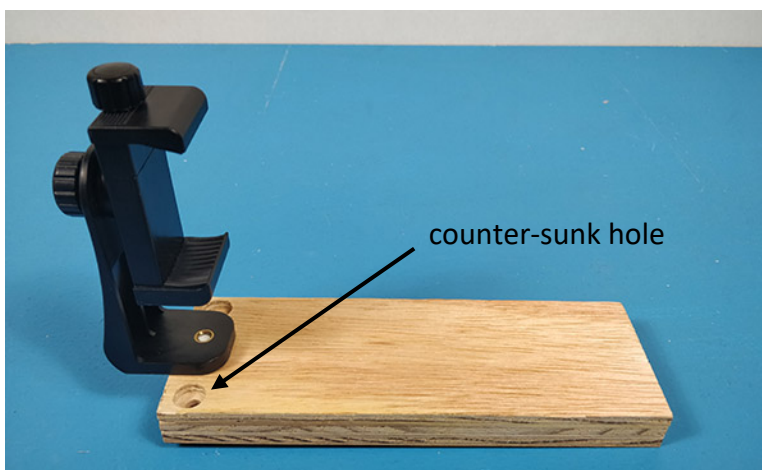
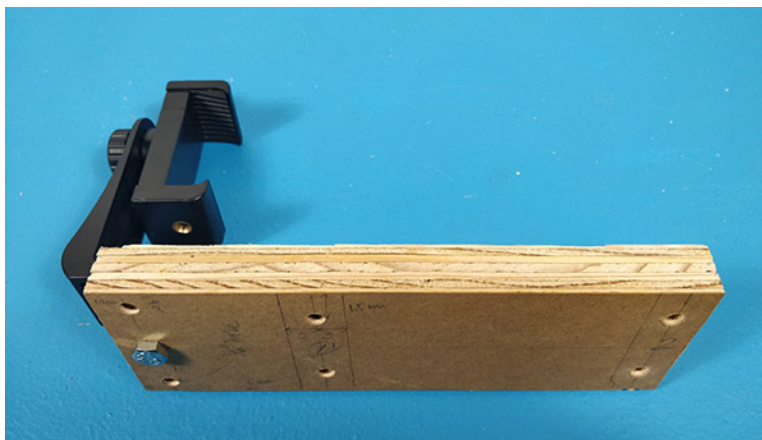
1. Your original Phenakistoscope animation disc from assignment 01, mounted on the cardboard wheel (black on back side)
2. A few books (the heavier the better, preferably hard-cover books)
3. Phenakistoscope frame components from your AD23300 course kit
4. Your cell phone
5. Kobra-Tech cell phone tripod mount with shutter remote
6. Hardware:
 - 1x pan head Phillips screw, 10-32 thread, 1-1/4" long
 - 1x steel hex nut, 10-32 thread size
 - 1x steel hex head screw 1/4"-20 thread size, 1" long
7. A small piece of corrugated cardboard (or something of similar thickness)

Step 1. Attach Kobra-Tech cell phone tripod mount to the Phenakistoscope frame - which now becomes a simple "tripod."

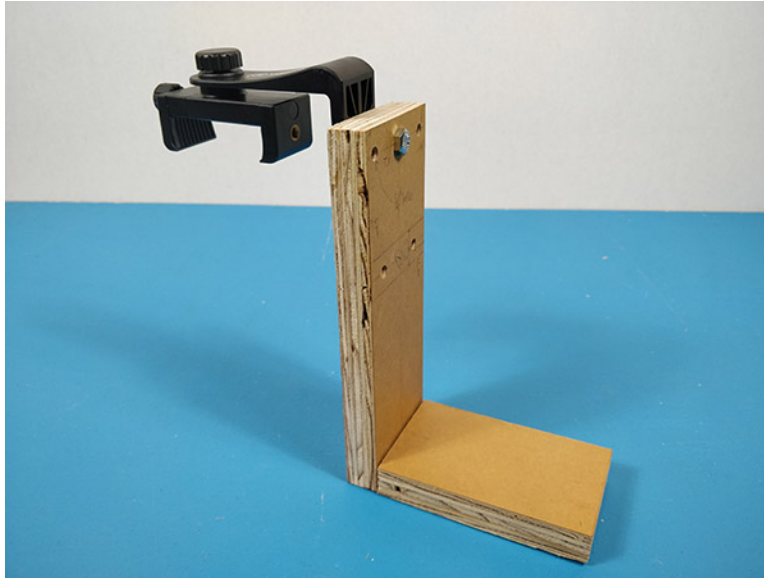
Use the center hole and push the hex head screw (1/4"-20 thread size, 1" long) through it like shown below (the screw's head is on the top side of the board - not the one with the counter-sunk holes):



Next, attach the tripod mount from the bottom side (the side with the counter-sunk holes):



Then, attach the second wooden piece to the Phenakistoscope frame, like this:



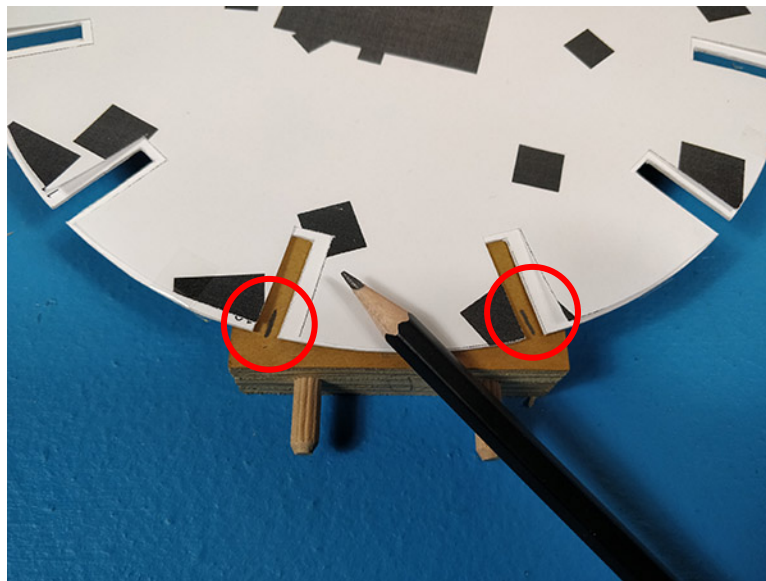
Put this improvised “tripod” aside for now and continue with the preparation of your Phenakistoscope disc.

Step 2. Prepare your Phenakistoscope wheel

Put the Phillips screw (pan head, 10-32 thread, 1-1/4" long) through the hole in the third wooden piece of your Phenakistoscope frame and secure it with a steel hex nut (10-32 thread size):

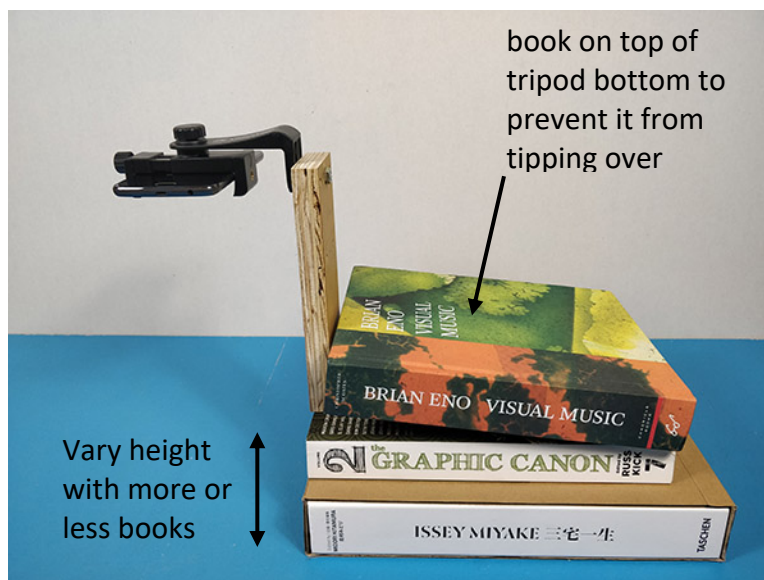


Center one frame of your animation on the wooden block and, using a pencil, mark the two slits on the left and on the right of the frame. These will become your reference marks, so you can rotate your Phenakistoscope wheel exactly the same amount from one frame to the next:



Step 3. Setting up your cell phone camera to take pictures of the Phenakistoscope disc

Clear a work area on your desk and bring in a desk lamp for good, even lighting. Attach your cell phone to the tripod mount (make sure to go into its Bluetooth Settings to pair the shutter remote beforehand and then go into your photo app). Using a pile of books (you can vary the height depending on how many books you use) lift the cell phone “tripod” off your working surface, so that the camera frame can capture the whole animation disc without cropping it. Use a heavy book on top of the bottom part of your “tripod” to keep it from tipping over (it will be top/front-heavy):



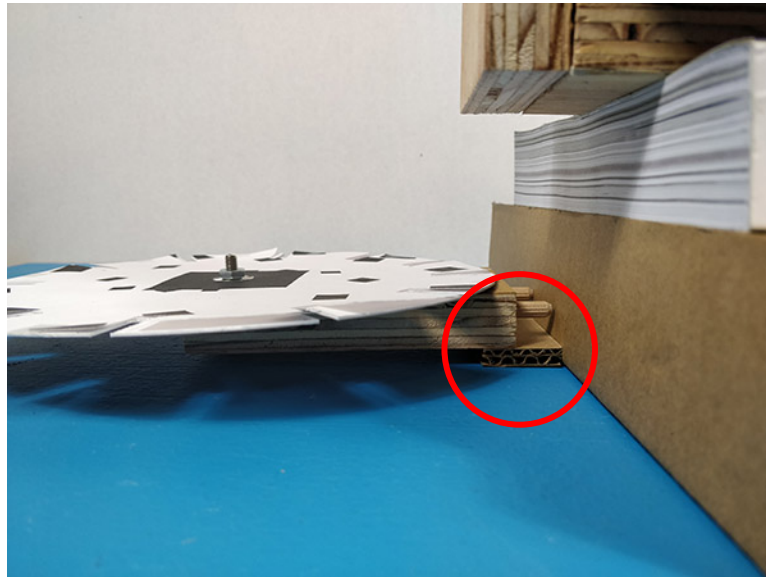
Check one more time that you can see the full disc in your photo app. If cropping occurs, add more books to move the camera further away from the Phenakistoscope disc.



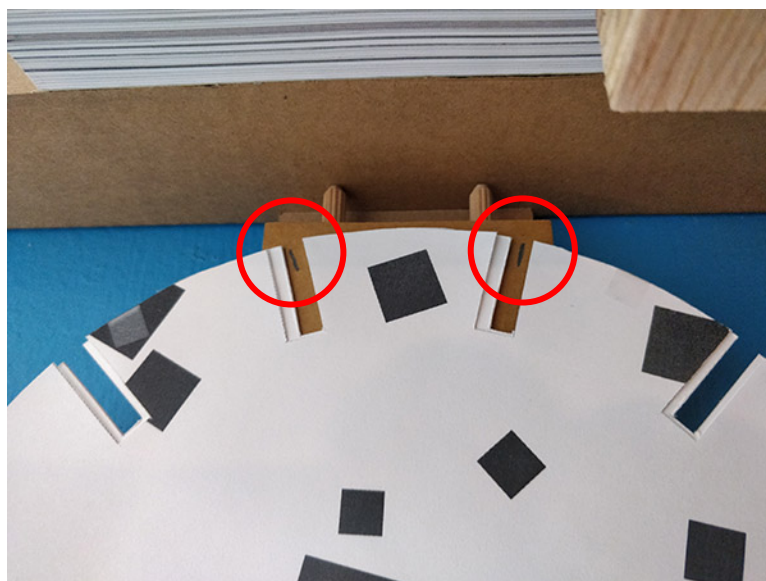
Lighting tip: if you have two desk lamps, place one on the right and one on the left-hand side of your Phenakistoscope disc. This will further eliminate shadows or uneven lighting.

Step 4. Get ready to take pictures

The head of the screw attaching the Phenakistoscope wheel to the wooden block makes the setup a bit wobbly, so I slid a thin piece of cardboard (roughly the same thickness as the screw's head) under the bottom end of the wooden block holding the Phenakistoscope wheel. This stabilized the wheel significantly:



Finally, align the first frame of your animation with the reference marks on the wooden block you created in step 2:



Step 5. Take pictures!

Tap your cell phone screen one more time to set the focus to the center of the Phenakistoscope disc. Then, with your first frame set up, take a picture using your shutter remote.



Avoid at all costs touching your cell phone screen to take pictures and be careful not to bump into the cell phone tripod (or the books) while you are taking your pictures - if you do, start over from the beginning.

After taking the first picture, rotate the Phenakistoscope wheel counter-clockwise to the next frame, use your shutter remote and take the second picture. You will need to take 12 pictures total to cover your entire animation, rotating the Phenakistoscope disc from one frame to the next after taking each picture.

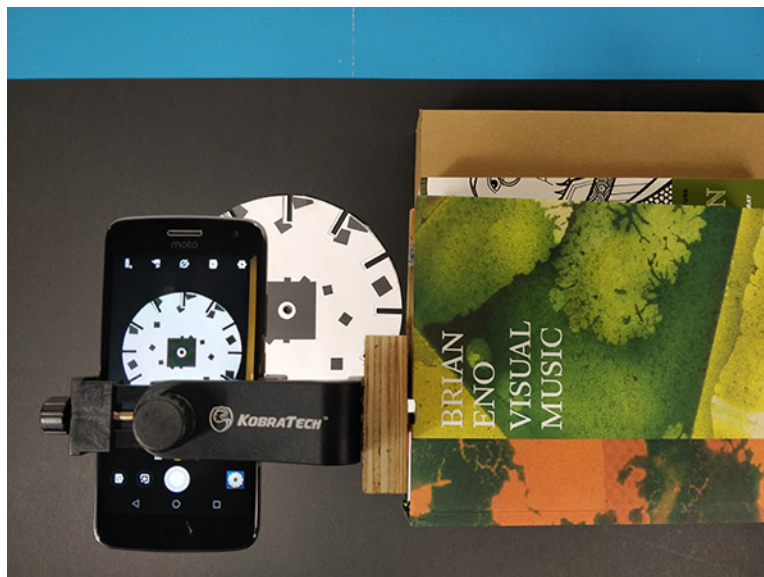
Step 6. Take one more picture of the Phenakistoscope disc on a neutral (preferably black) background

I use a sheet of black photo carton, but you can use any solid colored paper sheet



I am using a fairly big sheet, but any paper sheet, just slightly bigger than your Phenakistoscope wheel will do.

Take the Phenakistoscope wheel off the wooden block and just lay it flat under your cell phone tripod, like this:



Take just one more picture like this and transfer it to your computer, together with the 12 other pictures taken in the steps before. We will use the 12 individual pictures to create a stop-frame animation of your Phenakistoscope disc in Adobe Premiere. We will then use this last (or thirteenth) picture taken on the solid-colored background to create a second animation of your Phenakistoscope disc that will look very similar to the first one but uses keyframes and mattes in its creation instead of individual frames.

Part 02 of this workshop will continue as a video tutorial on Youtube...