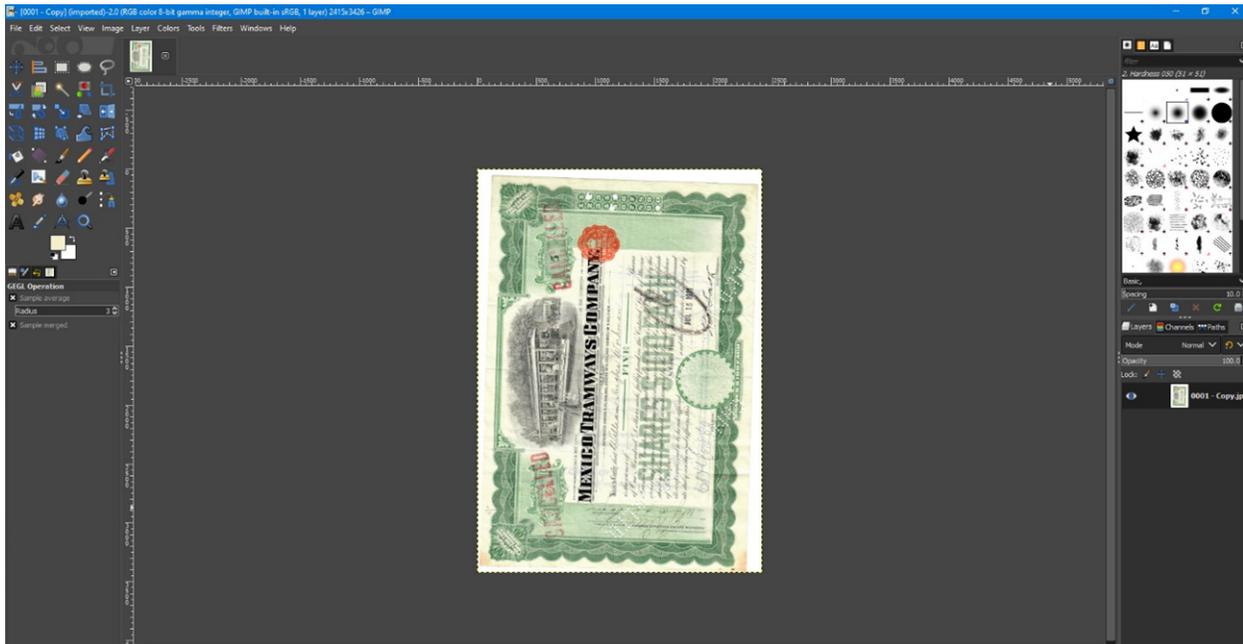


→ IMAGE MANIPULATION ←

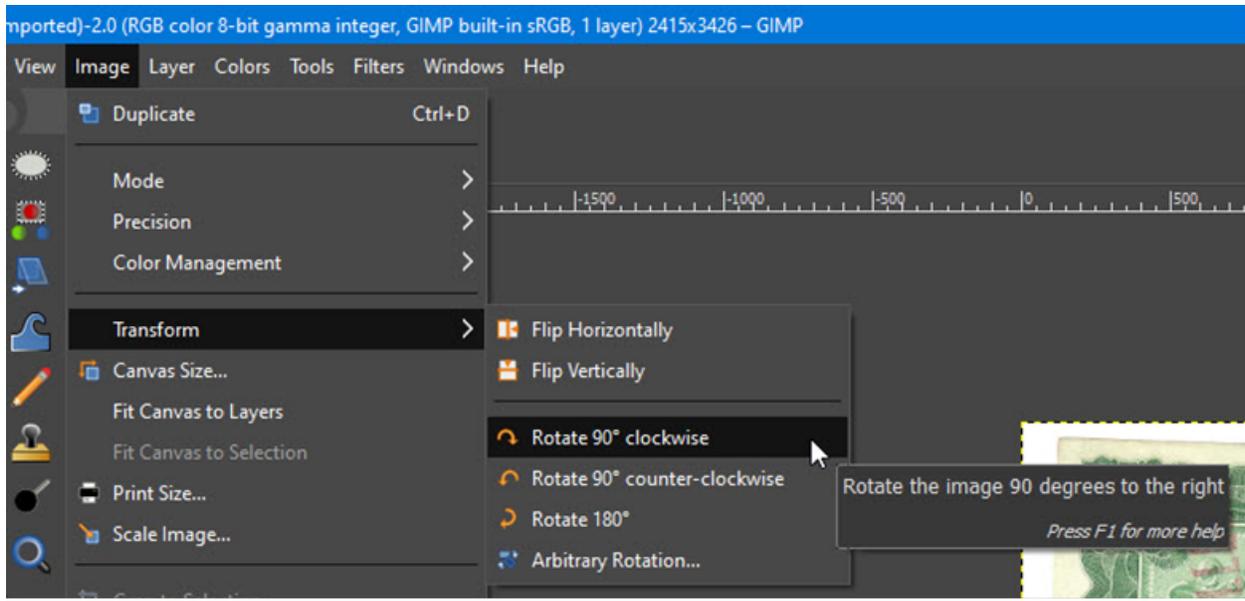
Straighten certificates using GIMP

I'm going to show how to rotate images of certificates using GIMP, the *most robust* FREE image editing software that I've found. I am going to assume you are scanning certificates. You may use this technique to straighten photographs, but you will need further work to remove lens distortion and make images look rectangular. (See another tutorial within the Image Manipulation section on that subject.)

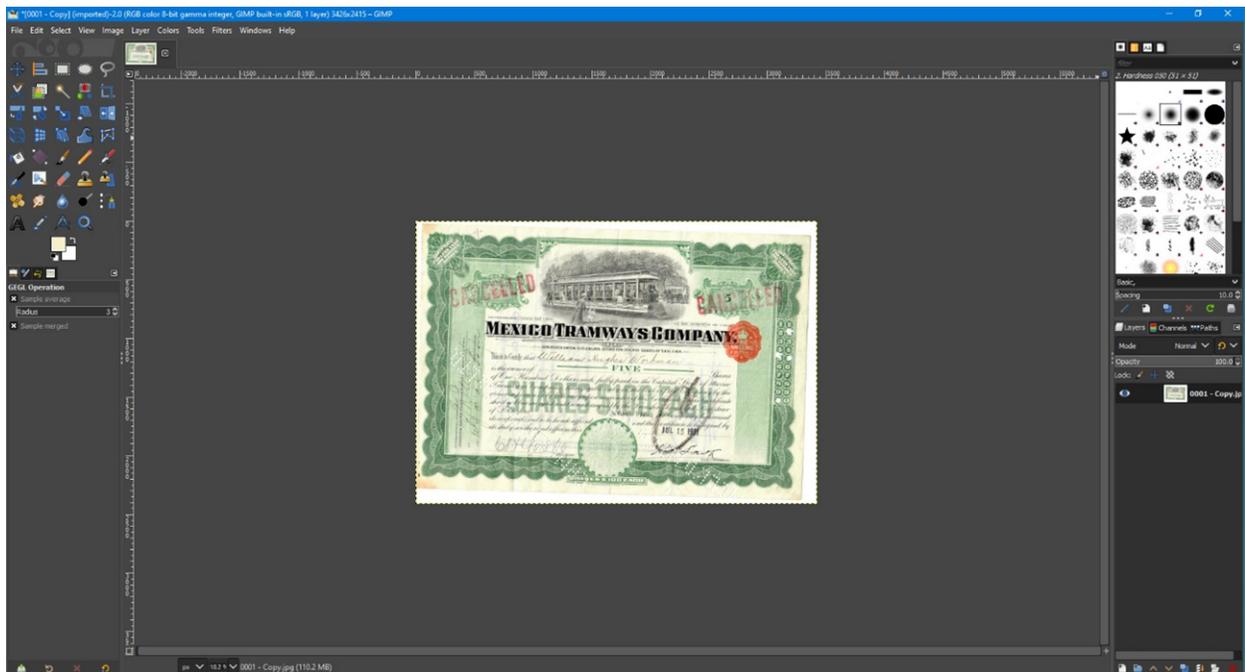
Open an image in GIMP.



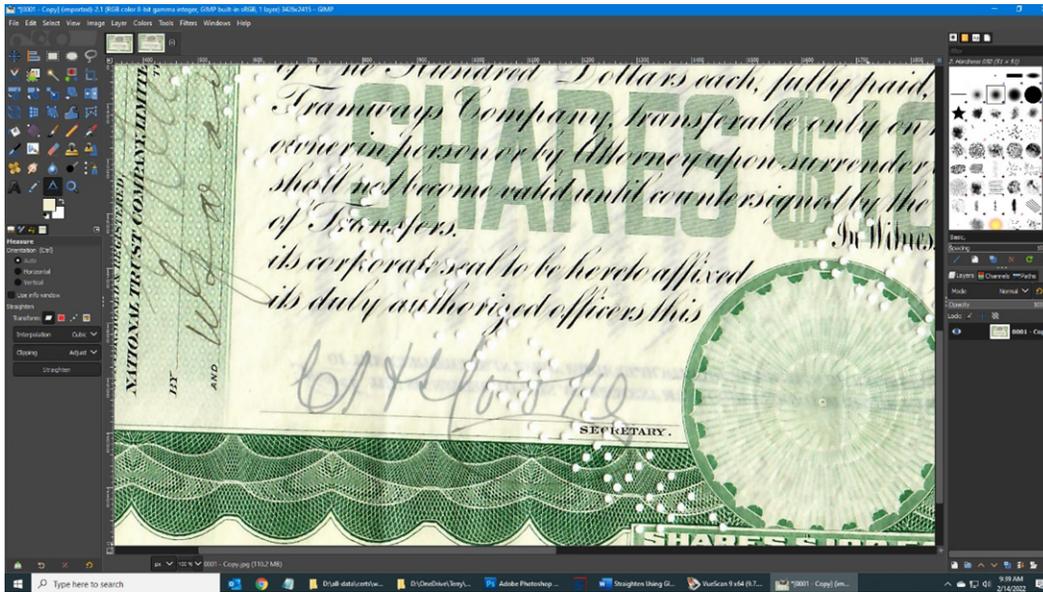
If the certificate is not oriented properly, click on **Image > Transform > Rotate 90° Clockwise** (or other choices as appropriate) in the top menubar.



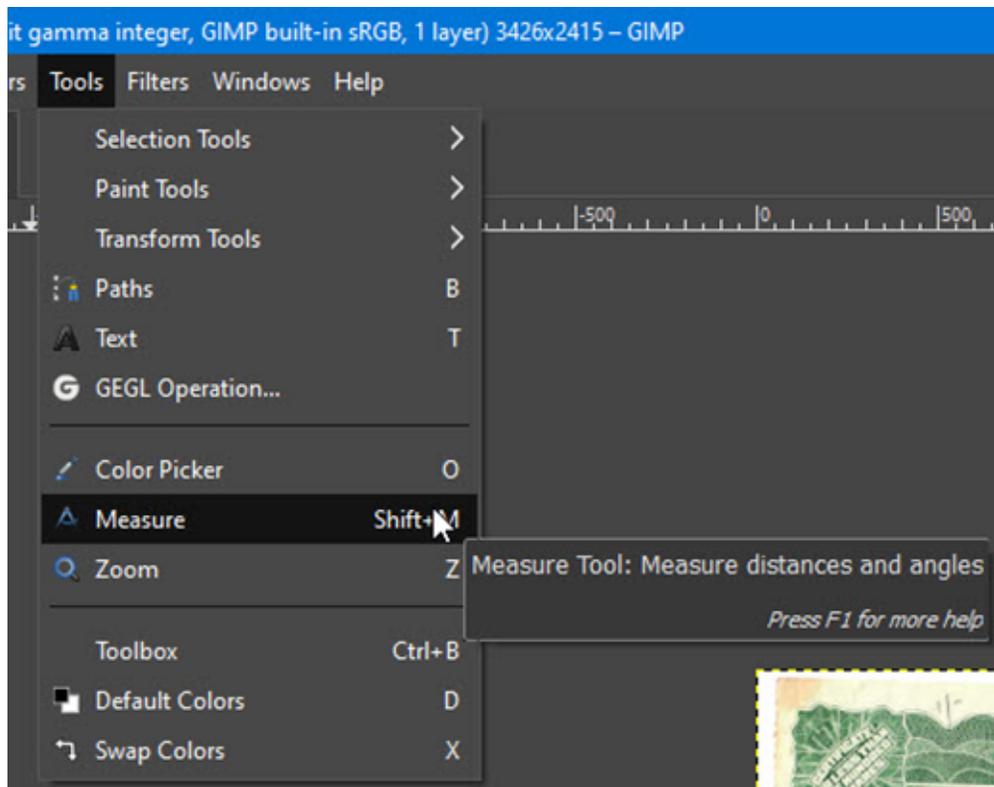
And the result.



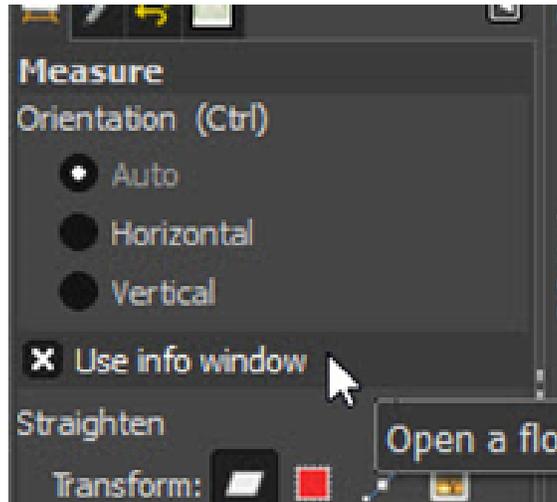
Zoom in on the left side of a straight section of certificate border. Either top or bottom borders will work. Hold down the Ctrl key while rolling the mouse wheel forward so about a third of the certificate is visible. (Start with top corners if fixing vertical format certificates.)



Select **Tools > Measure** from the top menubar.



A new dialog box will appear in the panel along the left side of the screen. Click on **Use info window**.



Locate a horizontal feature to use for alignment. A narrow line is the best. Also usable are typical border features including scallops, circles, diamonds, etc. Just about any repetitive element of borders can be used. Use text for alignment only as a last resort. Borders were normally printed first and text was added sometime later and not always properly aligned with borders.

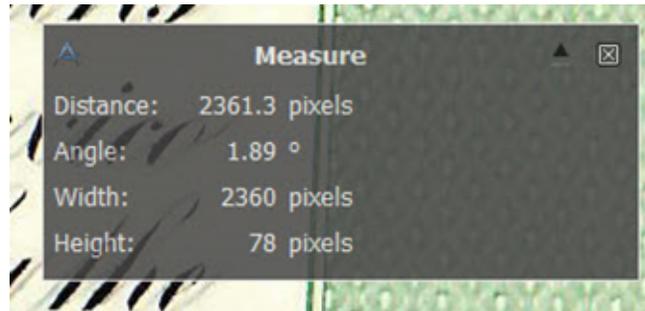
Click on a horizontal feature with the left mouse button and hold down while dragging the cursor **to the right**. The screen will pan automatically. (Start at the top and drag the cursor down if straightening vertical format certificates.)



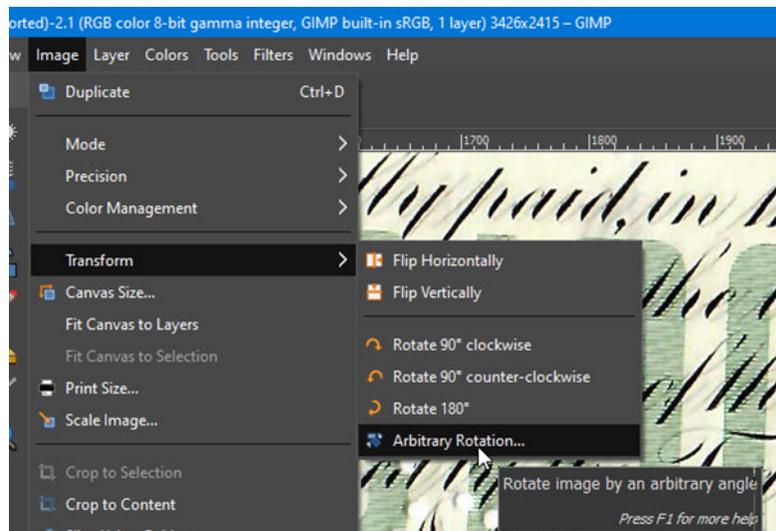
When you reach the other end, make sure the cursor is positioned exactly on the same line or feature and let up on the mouse button to finalize.



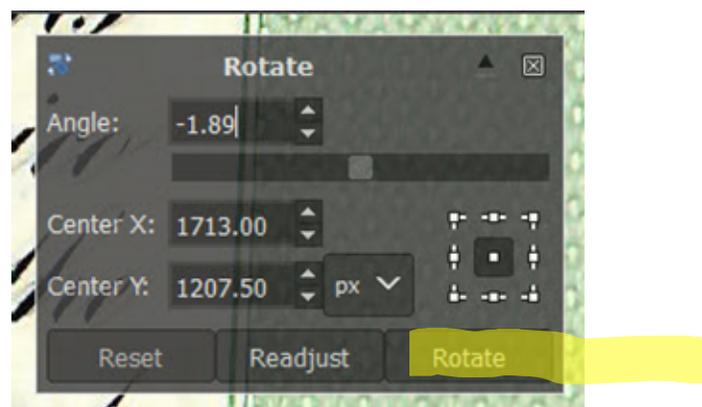
An Info panel will open, (probably at the top right). Make note of the angle displayed. (1.89° in this case.). A positive angle means the image is rotated clockwise.



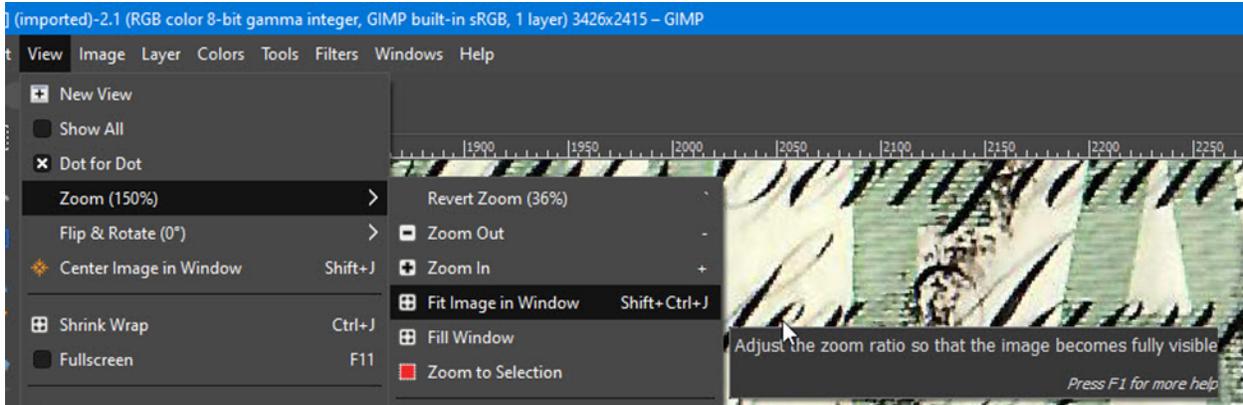
Click **Image > Transform > Arbitrary Rotation** in the top menubar.



The Info box will change to "Rotate." Enter the inverse of the value obtained from the "Measure" box. In this example, the angle measured was clockwise 1.89 degrees. Therefore, the image needs to be rotated counter-clockwise. Enter -1.89 degrees. When finished, click "**Rotate.**"



Zoom out to see the entire certificate. Hold down Ctrl and roll the mouse wheel backwards or select **View > Zoom > Fit Image in Window**.



Crop as needed.

