Create your own Portable Obscura.

Materials required:
an old shoebox or similar; scissors; tape; tracing paper; darning needle/ small nail.

A portable obscura can be made very simply out of an old shoebox or other similar shaped box. Note: the depth of your box in relation to it’s width will effect the size of the image, a longer box will give a more telephoto/ larger image and a shorter box will give a more wide-angle/ smaller image.

Select a box that is constructed of lightproof material. Replace one side of the box with a sheet of tracing paper. At the end directly opposite the side you have placed the tracing paper on, create a small, pin sized hole. If you can not do this through the material then cut a 20mm square piece of tin from a drinks can, pierce it with a darning needle, then create a square hole in the centre of your box to attach this with either black electrical or gaffe tape.

With a dark jacket or piece of black fabric take your obscura outside to a suitable view, use your fabric/ jacket to create an enclosed dark tent around your head and your tracing paper screen – leaving the end with the hole open to the world and pointing toward the view you wish to capture. Give your eyes a few minutes to adjust and you will begin to see the world appear on your tracing paper screen, upside down and back to front.

Note: hold the obscura at arms length away from your face and look at the screen – if you hold it too close and try to look through it, you won’t see anything.

If you want to use your obscura as an aid to drawing, make sure your tracing paper screen is of a good size, a piece of frosted Perspex is ideal as it also gives you a surface to lean on. You will need a small table or other steady surface to sit your obscura on and a slightly larger piece of blackout material.

19th Century Camera Obscura
Note the common irregular depiction of scale between the artist and the camera obscura.

Drawing with the help of a Camera Obscura, 18th century