CAMERA IN MOTION
Project Assignment: (Advanced build) Camera Dolly for a full sized camera

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LADDER / PIPE DOLLY

Shooting documentaries, or low budget feature films, often involves creating shots that would normally be achieved with much more expensive equipment. The ride on board camera dolly is a great example. While great for what they are designed for, they are cumbersome, slow to set up and require too many crew members to operate if you need to stay nimble and shoot quickly. My solution was to build a camera dolly that easily carries a 40lbs camera rig, including a fluid head to support the camera. For a track I use a ladder or plastic pipe (1 1/2”-2” diameter). This can quickly be set up and then moved to the next location. You travel with the dolly, but acquire a ladder / pipe once you reach location. A great solution for me, as I typically travel internationally.

I now use an H shaped dolly, but the first design I tried was a simple T bar. Your assignment is to build this version 1 dolly, refine your use of the rig and then if you like it, you can replace the wooden parts for aluminum bars and you will have a dolly that will give years of service

Version #1

Version #2

Behind the scenes shots of shooting “Big Picture Earth” for streaming service Curiosity Stream

THE PARTS LIST

1. Two 2x4 wooden studs in 24” length $2.21 each

2. 3/8” drill bit to make a hole to allow for a bolt attach a tripod head and mount wheels, camera etc $4

3. 3/8 bolt to attach tripod head $1.70

4. Joining plates to place on the top and bottom of the wood $2

5. Six 1” wood screws

6. Wheels (the expensive part of the build, but the same ones can be used to run the H frame system in the first set of photos and will give years of use) $159

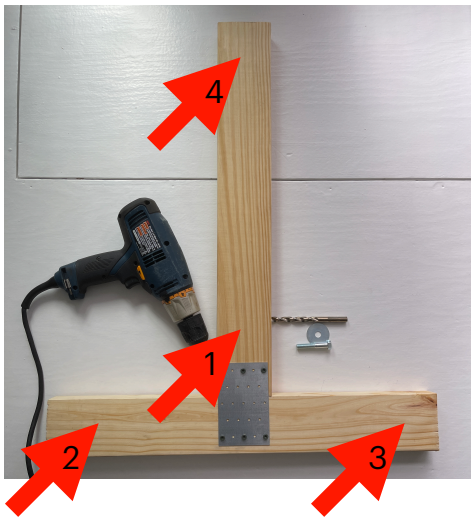
Total budget approximately $172

Tools required- power drill

INSTRUCTIONS

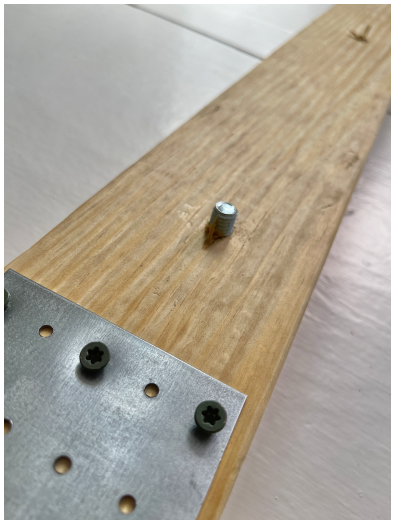
1. Use the joiner plates and screws to create the T bar from the two lengths of 2x4” timber (power drill recommended and self drilling 1” screws)

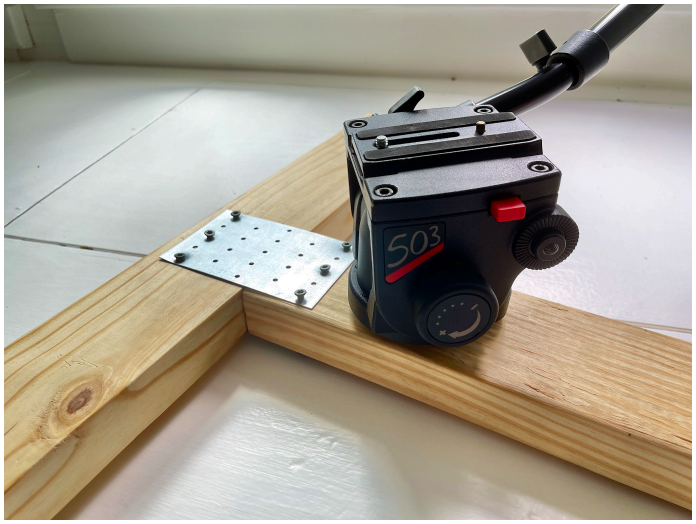
2. Drill a 3/8” hole (1) in the bar to accommodate a 3/8” bolt that will be used to attached a tripod head. And three holes to mount the wheels (2,3 & 4)



Drill here

3. Push through the 3/8” bolt to mount the tripod head





4. Mount the wheels and you are ready to go. (If you intend to use a ladder, attach the two wheels that are inline (2 & 3 on diagram above). Then lay the rig on the ladder to measure the spacing for the third set of wheels (4). Using pipe is easier as the wheel spacing is not critical

If you are interested in upgrading to the aluminum bars, I purchased them from eBay. They are sold by a company called Zoro.