

Timber and Spice Rack

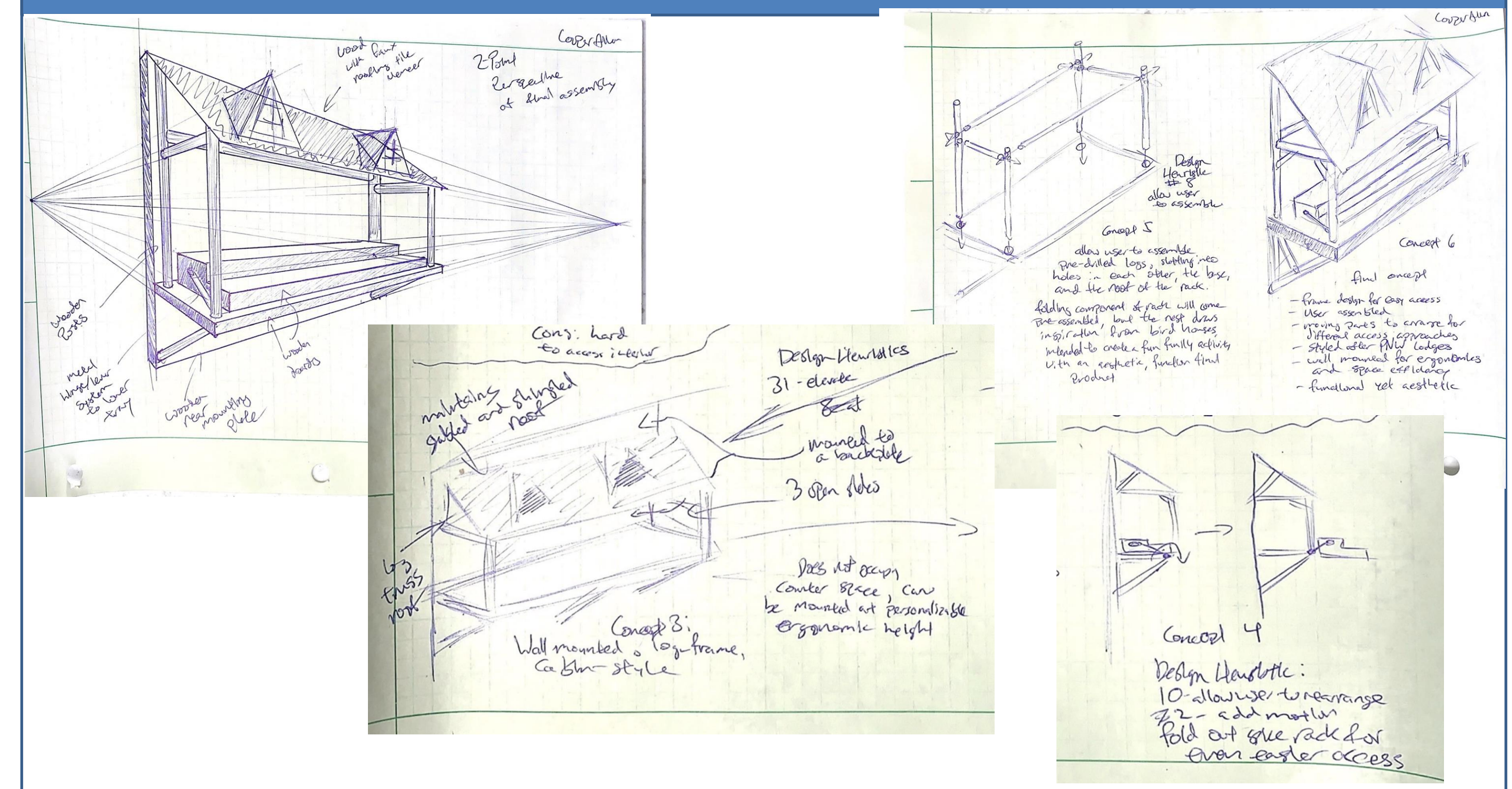
Cooper Allen

Product Description and Creative Ideation

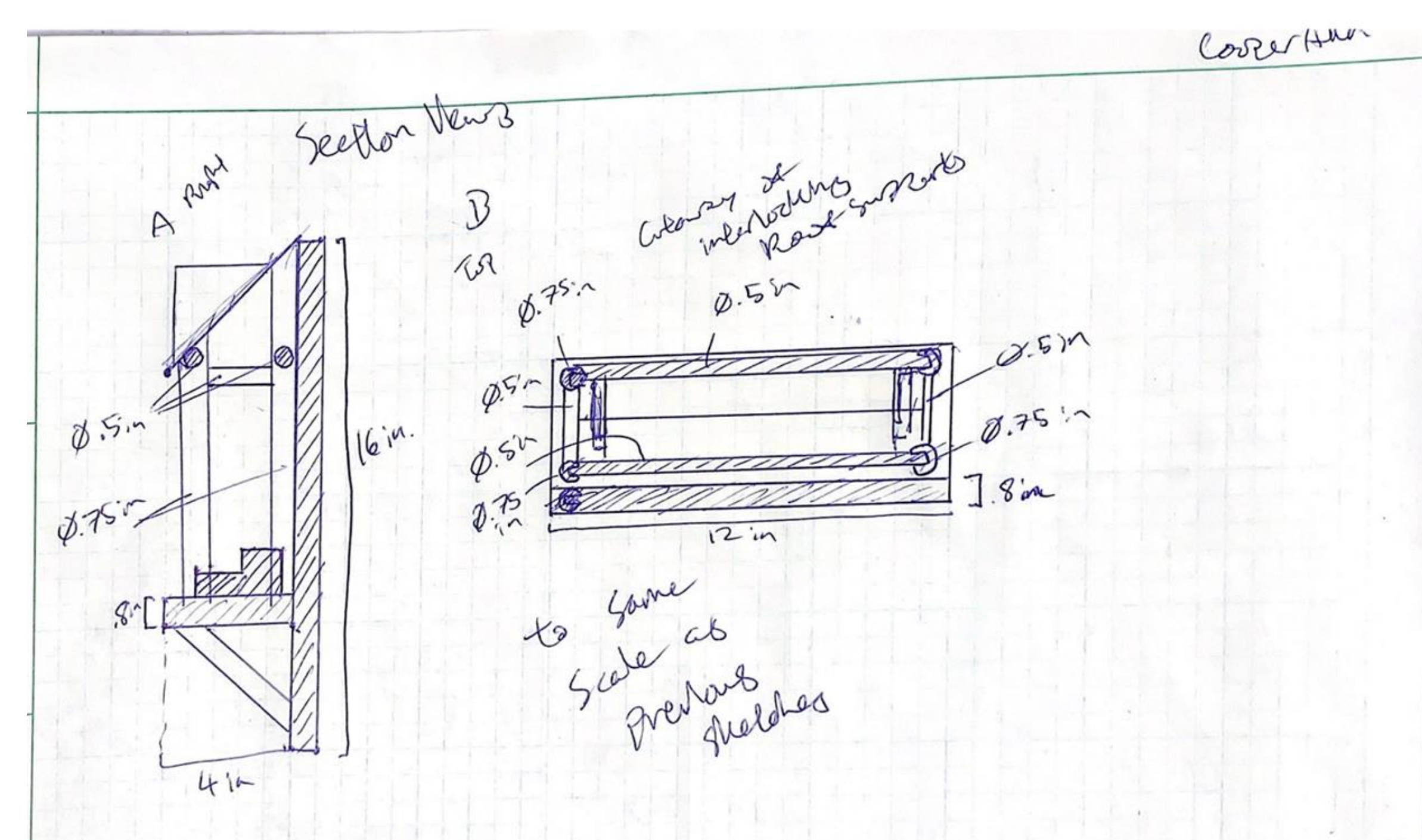
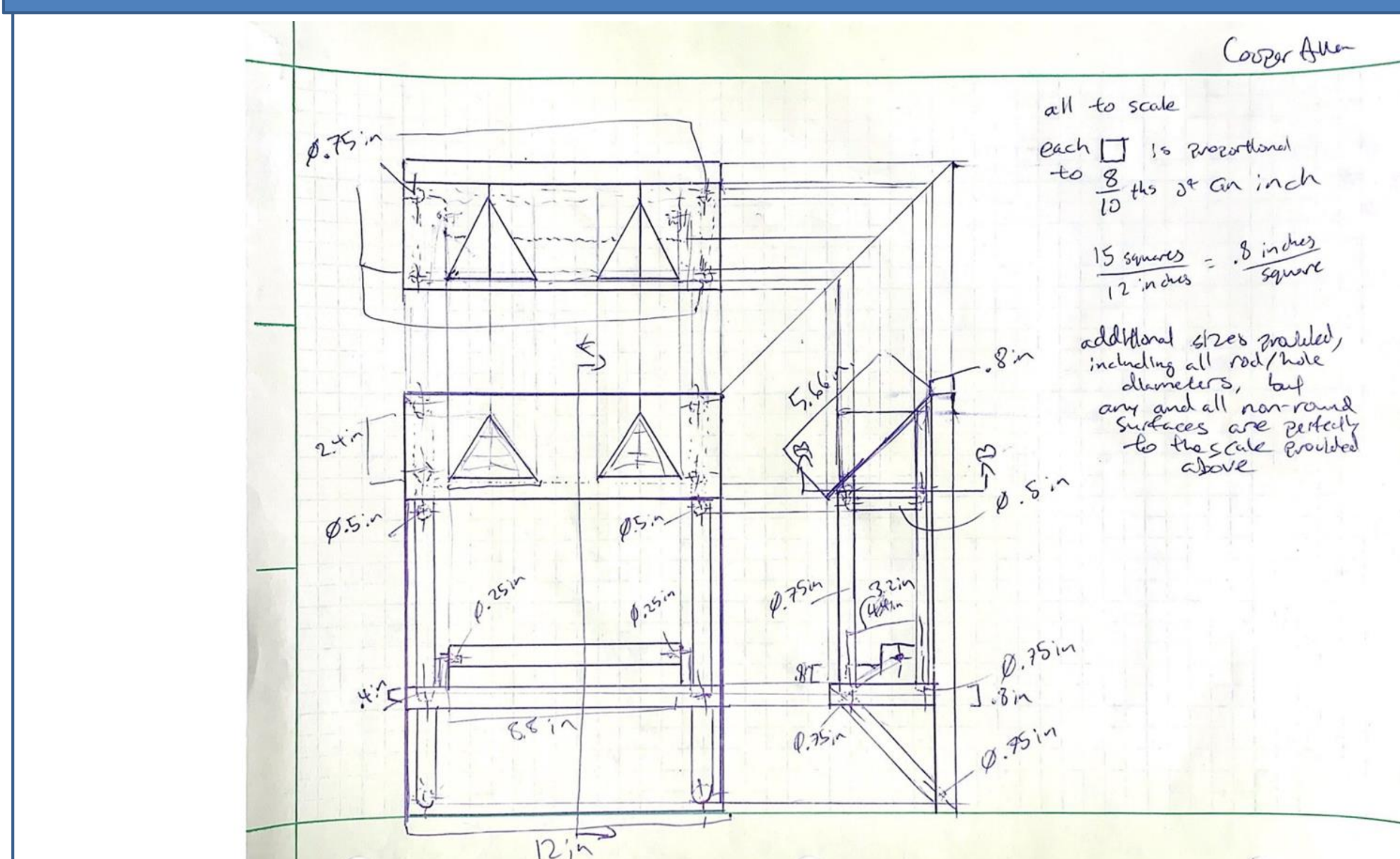
This product is a spice rack meant to be mounted on the wall of a kitchen, styled after the style of timber lodge found throughout the Pacific Northwest, especially in association with ski resorts, hotels, and national parks. The design is intended to provide easy access to the user's most commonly used spices and ingredients, while keeping with the cozy, rustic, and natural aesthetic of a timber lodge. It is wall mounted for easy access without cabinet doors, and so as not to occupy existing cabinet/pantry space.

Culturally, this is influenced by a style of building found commonly near my birthplace in Seattle, Washington. It is a style formed by necessity and natural resource availability, with the need for easily-assemblable, well-insulated buildings converging with the abundance of local hardwood populations to create the “log cabin” and “timber lodge” building styles throughout the Northwest. This personal connection, in combination with the more universal connection of cooking and the kitchen to family, creates a deeply personally-inspired piece of home décor.

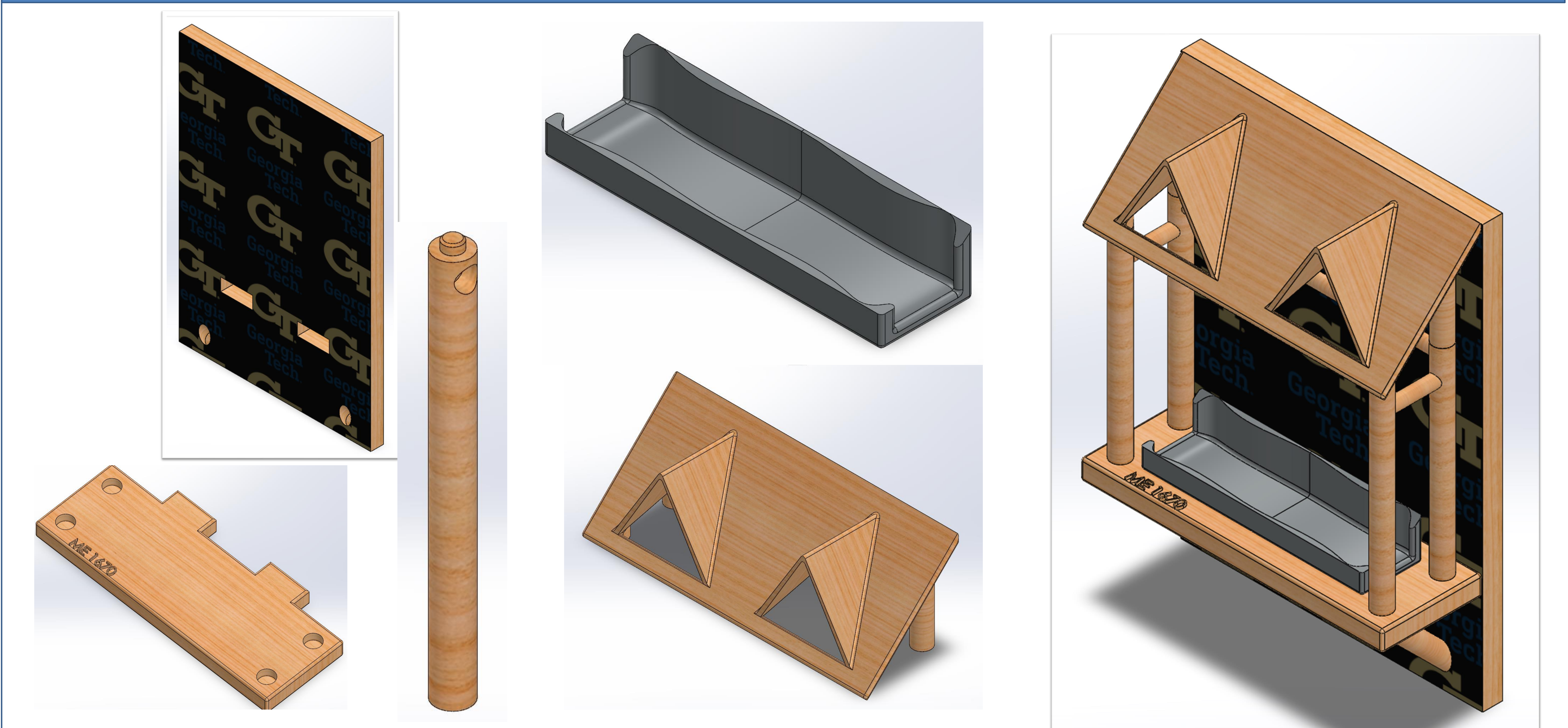
Thumbnail Sketches and Perspective View



Multi-views, Section Views and Assembly Drawings

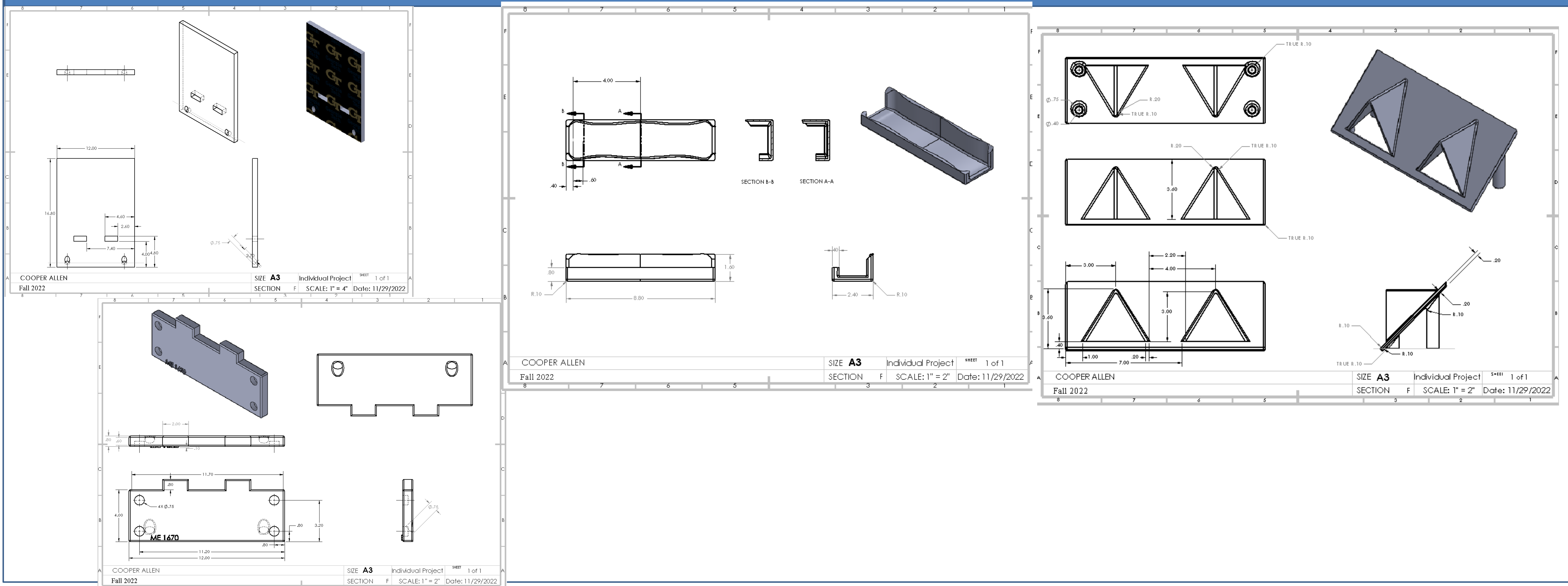


Rendered Part and Assembly Views





Part Working Drawings

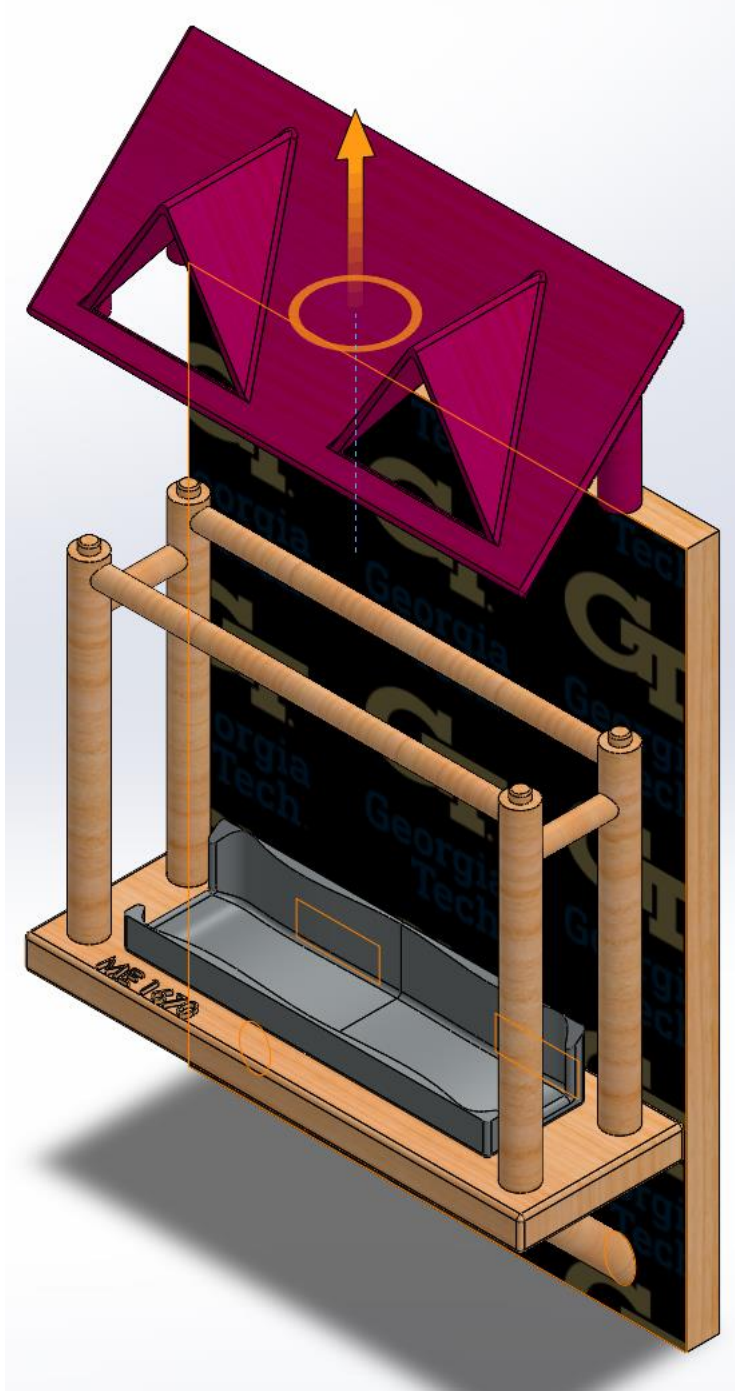


Dimensional Tolerance and GDT Tables

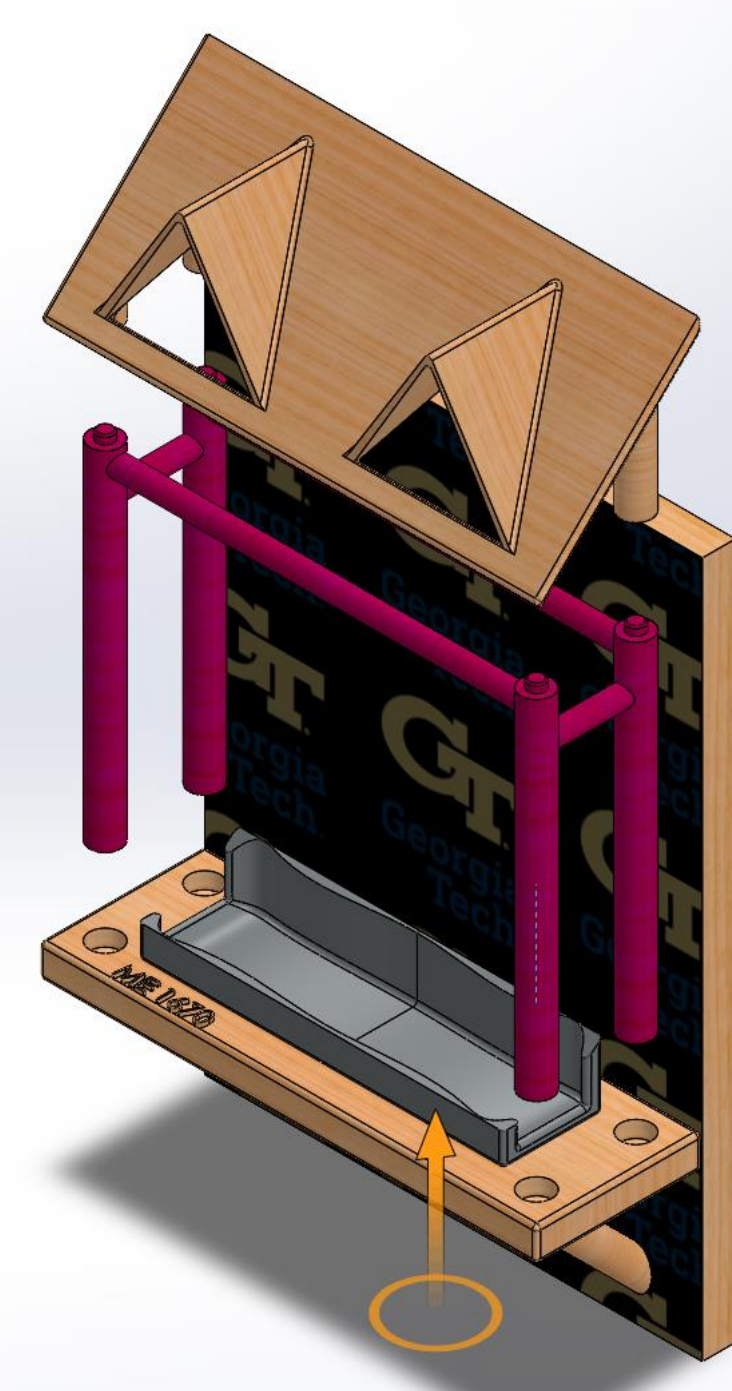
Part	Modeling Approach	LMC / MMC	Tolerance	Parameter
Baseplate	Extrude, Cut Extrude	LMC	.02 in	Surface Profile \sqrt{A}
Backplate	Extrude, Cut Extrude, Fillet	LMC	.02 in	Surface Profile \sqrt{A}
Removable Tray	Loft, Fillet, Mirror	LMC	.02 in	Surface Profile \sqrt{A}
Vertical Columns	Extrude, Cut Extrude, Chamfer	MMC	.02 in	Cylindricity \sqrt{A}
Bottom Supports	Extrude	MMC	.02 in	Cylindricity \sqrt{A}
Beams	Extrude	LMC	.02 in	Cylindricity \sqrt{A}
Roof	Extrude, Cut Extrude, Chamfer, Fillet	LMC	.02 in	Surface Profile \sqrt{A}

Parts	Fit Type	Tolerance Limits A & B		MMC/LMC
Backplate & Baseplate	Interference	$2.000 \pm .02$ in	$1.950 \pm .02$ in	$2.02 - 1.93 = .09$ (MMC) $1.98 - 1.97 = .01$ (LMC)
Backplate & Bottom Posts	Interference	$.750 \pm .02$ in	$.700 \pm .02$ in	$.77 - .68 = .09$ (MMC) $.73 - .72 = .01$ (LMC)
Baseplate & Bottom Posts	Interference	$.750 \pm .02$ in	$.700 \pm .02$ in	$.77 - .68 = .09$ (MMC), $.01$ (LMC)
Baseplate & Vertical Posts	Interference	$.750 \pm .02$ in	$.700 \pm .02$ in	$.77 - .68 = .09$ (MMC), $.01$ (LMC)
Vertical & Horizontal Posts	Interference	$.500 \pm .02$ in	$.450 \pm .02$ in	$.52 - .43 = .09$ (MMC) $.48 - .47 = .01$ (LMC)
Vertical Posts & Roof	Interference	$.400 \pm .02$ in	$.350 \pm .02$ in	$.42 - .33 = .09$ (MMC) $.38 - .37 = .01$ (LMC)

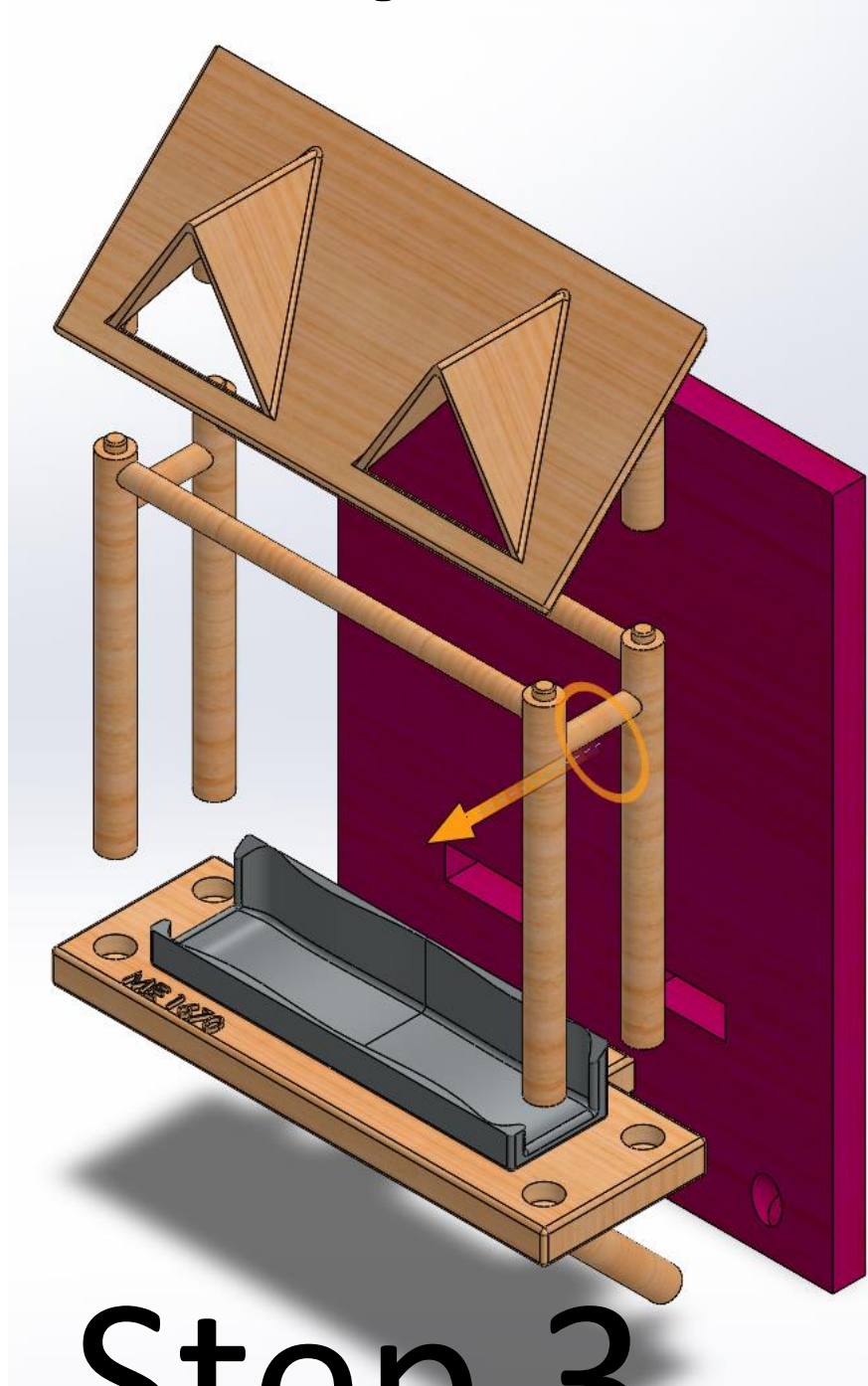
Assembly Instructions



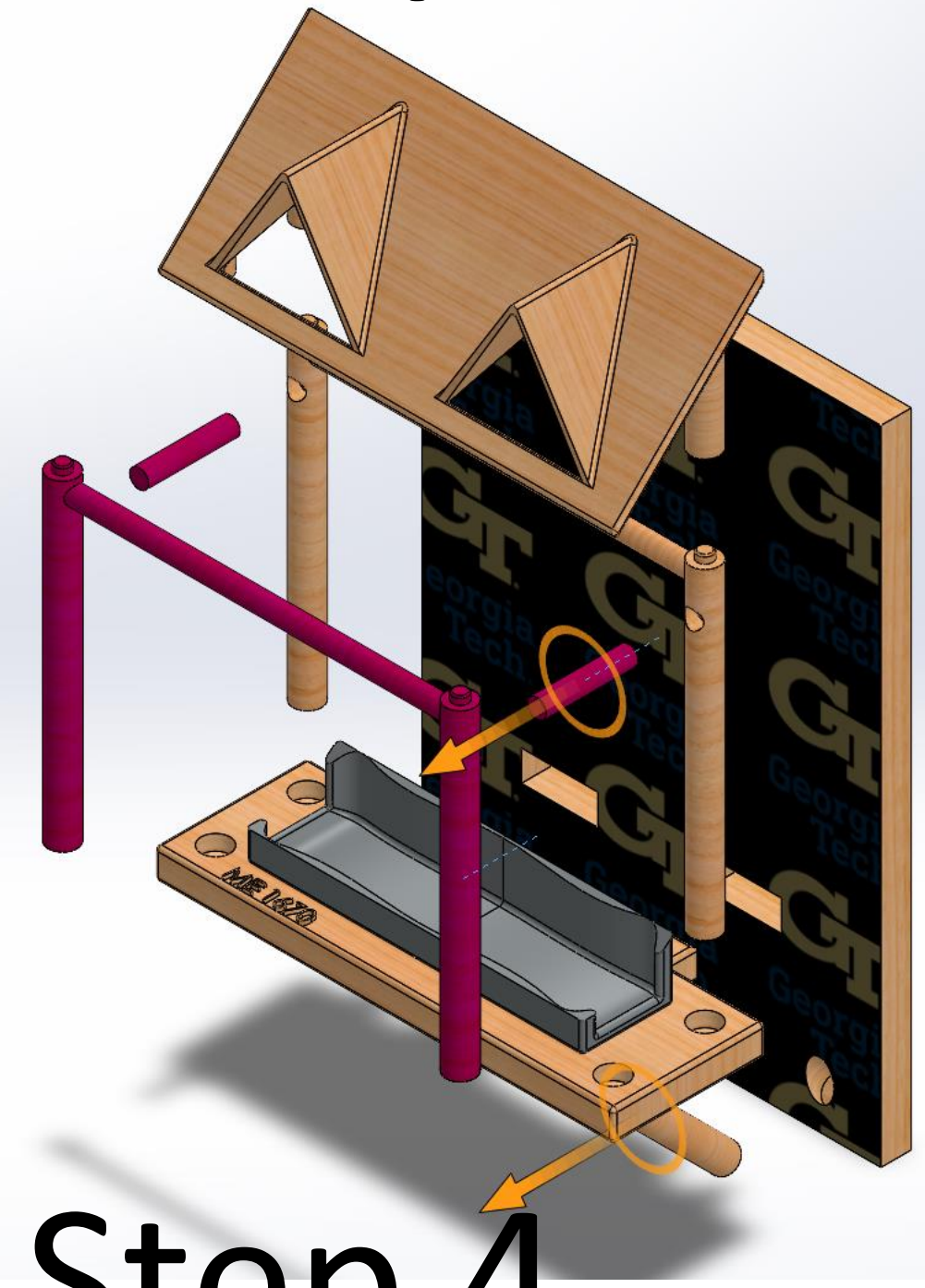
Step 1



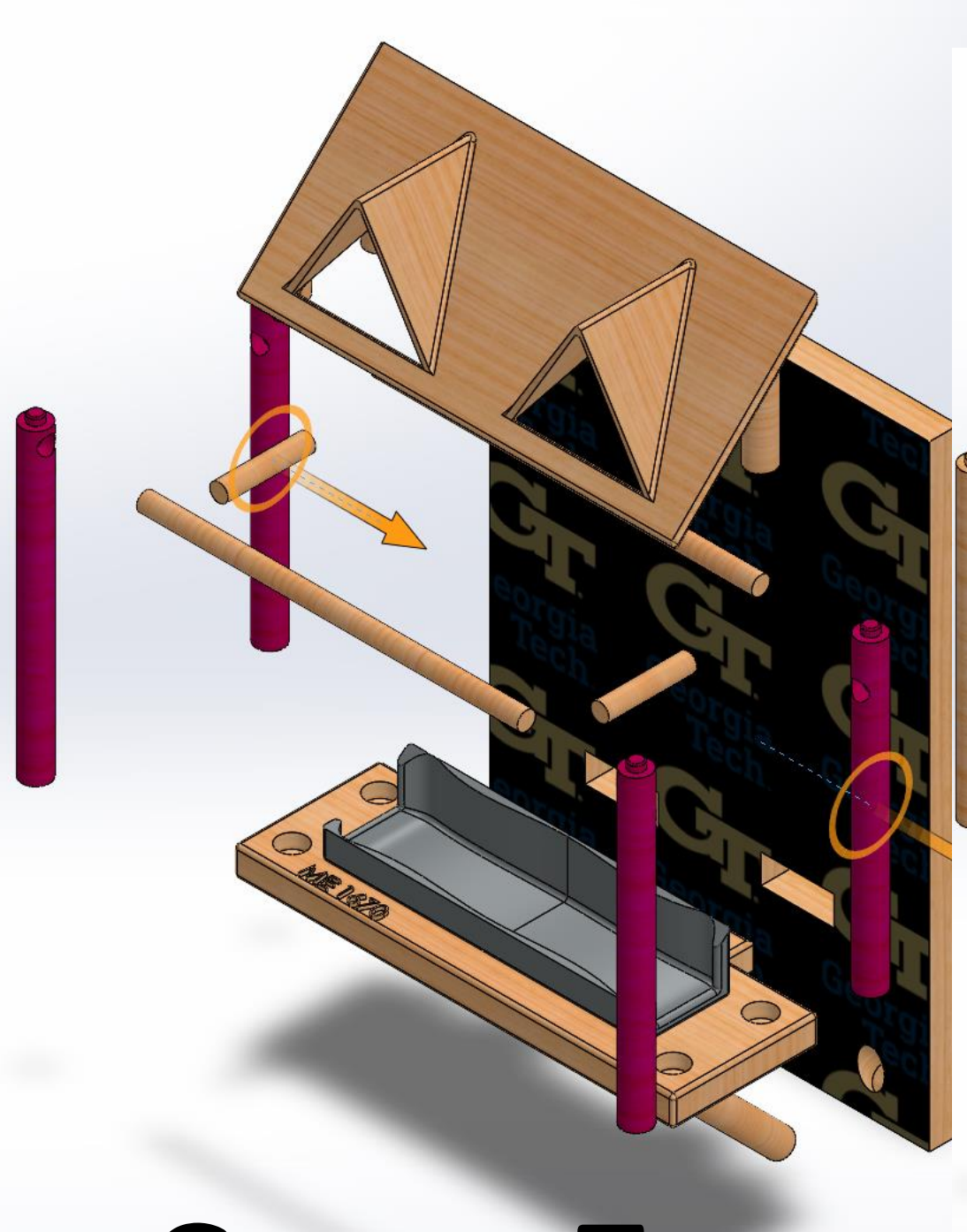
Step 2



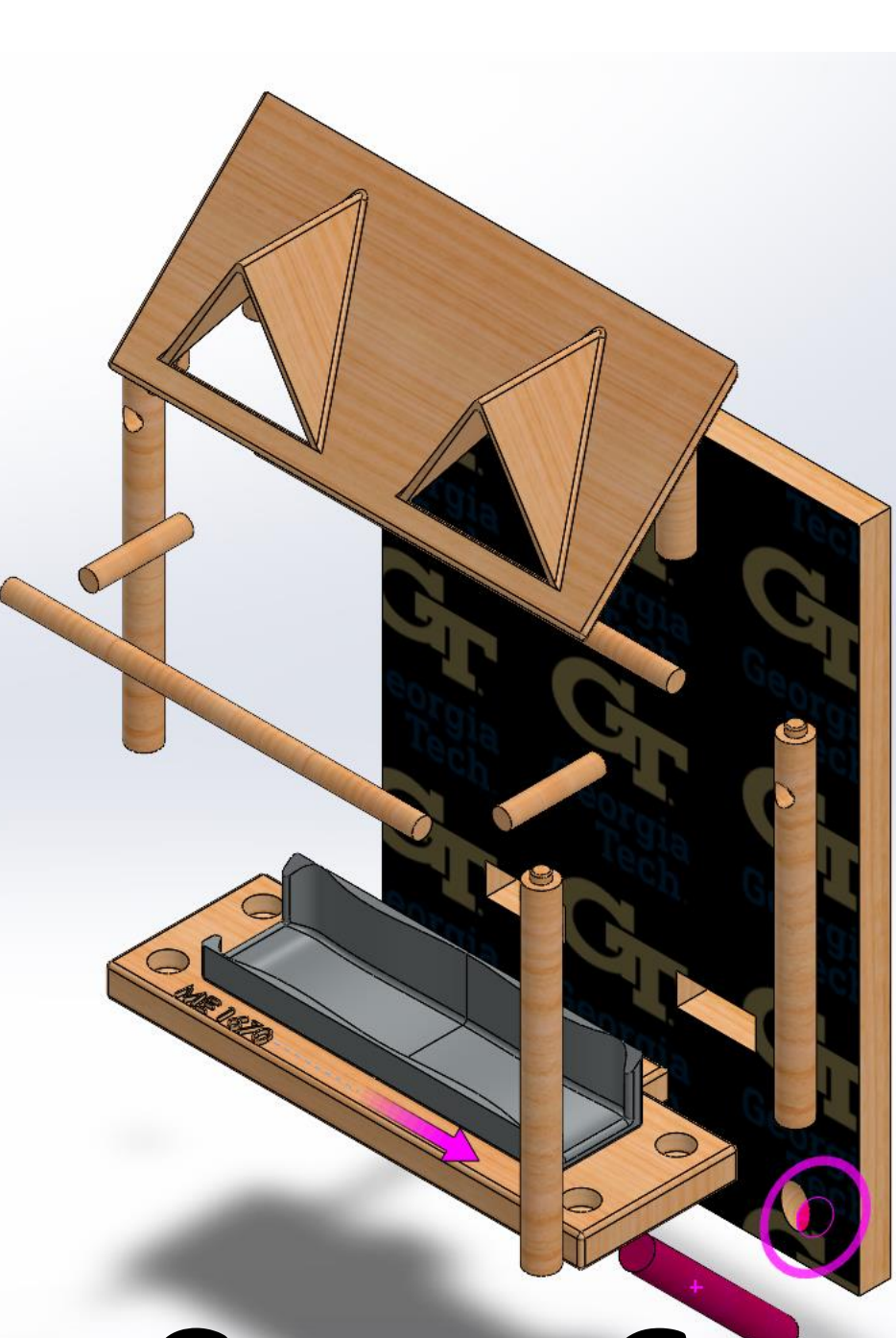
Step 3



Step 4



Step 5



Step 6

Exploded view with BOM Parts List

