

Building a Field Portable Colonial Tavern

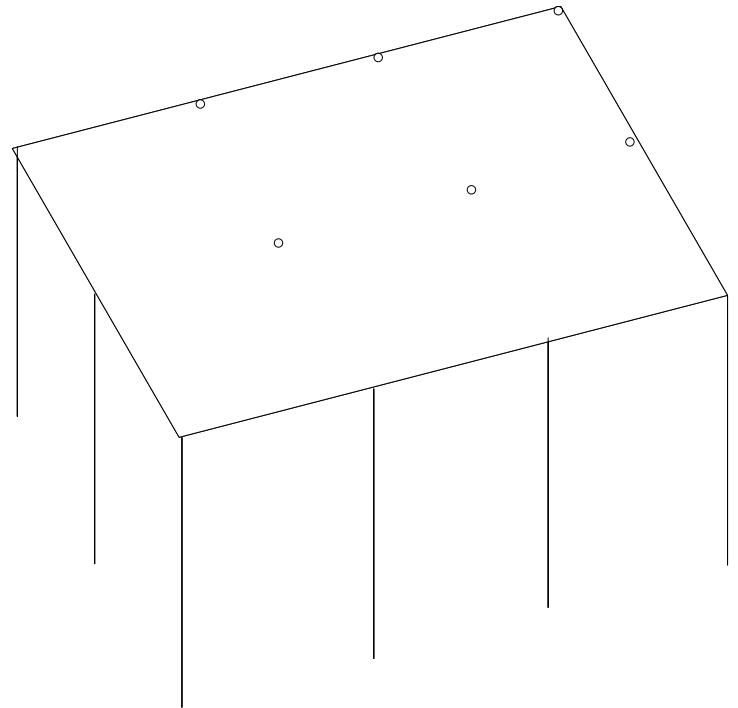
Before the latest wave of COVID shut it down, the Regimental Brewmeister was planning to operate a tavern as part of the “Frost Faire” at Pottsgrove Manor. Since running taverns at reenactments is our ultimate goal, I feel the time spent planning that event was well spent even though we were ultimately forced to cancel. One of the byproducts of this plan was the physical construction of a portable tavern which can be set up at the various sites we visit and this year, we built several key components of a field portable colonial tavern which can be set up at various venues both as a fundraiser for the site and for use by the soon to be launched Battlefield Brewing Company to sell beer to the public at events.

This document covers the construction of an inexpensive yet large Fly Tent to house the Field Tavern.

A commercially manufactured fly tent like are sold by Tent Smiths (www.tentsmiths.com) typically cost well over \$1300 when you include the canvas, the poles, ropes, and stakes. Amortizing this expense over the 6-8 events the Regimental Brewmeister supports each year is well beyond cost prohibitive so we needed a cheaper solution. These commercial tents are beautiful and durable but in the short term, we need something easy to set up and with a reasonable cost. The solution I chose was based off of a fly tent I saw at Fort Mifflin used by the Seadogs (<https://www.facebook.com/SeaDogsNJ/>) and is constructed using period methods from materials that can easily be acquired at your local Home Depot or Lowes.

Unlike Tent Smiths, I took some liberties in my historical interpretation and made the tent easier to transport as well as maintain. That said, there are no modern fasteners or any construction material and methods used that would not be available to an 18th Century sailmaker or tentsmith. I did use a canvas drop cloth just like the SeaDogs did and that had machine stitches. All other components were made with hand tools.

I chose a 12x15 canvas for my fly tent. There are many commercially available sizes and I briefly considered sewing two drop cloths together to get a different size. The tent poles, stakes, and dogbone guywire tensioners are all made from pressure treated lumber for durability. At some point, I may choose to paint the canvas as a waterproofing (and to add a little color to the encampment!). All told, this fly tent, complete, will cost me about \$150 and six hours of labor.



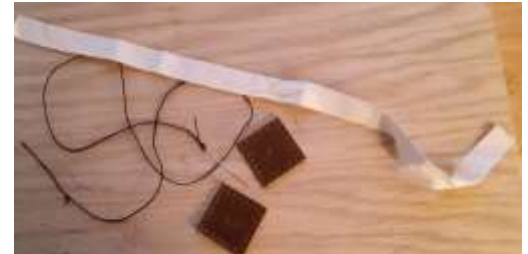
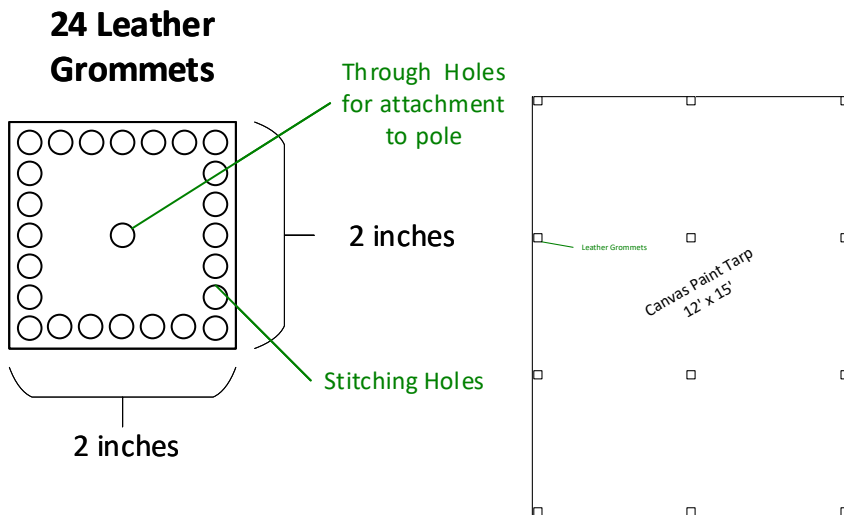
Fly is simply supported by the 12 poles passed through the grommets in the canvas. (guywires will be used to hold poles upright)

Quantity	Description	Price (ea)	Total
1	Canvas Drop Cloth 12 ft x 15 ft	\$ 32.98	\$ 32.98
14	Pressure Treated 1 x 2 8ft long	\$ 2.98	\$ 41.72
6	Pressure Treated 2 x 2 8ft long	\$ 3.98	\$ 23.88
24	Scrap leather Squares (2"x2")	\$ 0.10	\$ 2.40
25	Heavy Twine (yards)	\$ 0.10	\$ 2.50
12	1/4" dowel rods	\$ 0.25	\$ 2.97
24	10-penny nails	\$ 0.26	\$ 6.24
1	glue	\$ 2.18	\$ 2.18
1	rope (100 ft)	\$ 9.98	\$ 9.98
			\$ 124.85

Leather Grommets

The original fly I am copying had modern brass eyelet grommets at stress points where the poles attach to the canvas. This is, of course, needed to prevent the canvas from tearing with normal use but is not period correct for the 18th Century. I built leather grommets based on sailing stress points using 8oz leather squares. Two leather squares are cut for each stress point (total of 24 squares for 12 points) and punched for lacing. Finally an center hole of diameter slightly larger than the pins at the pole ends is punched. I then stitched the squares into each corner and every 4-6 feet around the parameter plus two center support points. In addition to the leather square, I stitched an 18' webbing strap under each grommet to allow the canvas to be tied to the pole for further security.

I considered gluing the square (in addition to stitching) but found stitching the center grommets difficult so I avoided this extra step. If I replace individual points, I may add glue.

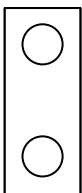


Tent Stakes and Tensioners

I originally planned to use iron stakes and strongly considered just buying a set of blacksmith made tent stakes like those sold by Crazy Crow

(https://www.crazycrow.com/mm5/merchant.mvc?Store_Code=CTP&Screen=PROD&Product_Code=6998-001-018) but the more I looked into that the less pleased I was with the option. I even considered buying some mild steel and bending and cutting my own but eventually, I decided to just go "old school" and cut tent stakes from the same 1x2 material I was using to build my tent poles. These will not be as durable as iron stakes and will likely need to be replaced often but when I loose one, I won't feel it is a big deal.

8 Wooden Guyline Tensioners



A nice alternative to making stakes is to buy them from Avalon Forge and they sell two versions of period correct tent "pins" or stakes. (<http://www.avalonforge.com/MainMisc.htm>)

While I am making the tent stakes, I will also cut 4" slabs and drill them to make guywire tensioners.

8 Wooden Tent Stakes



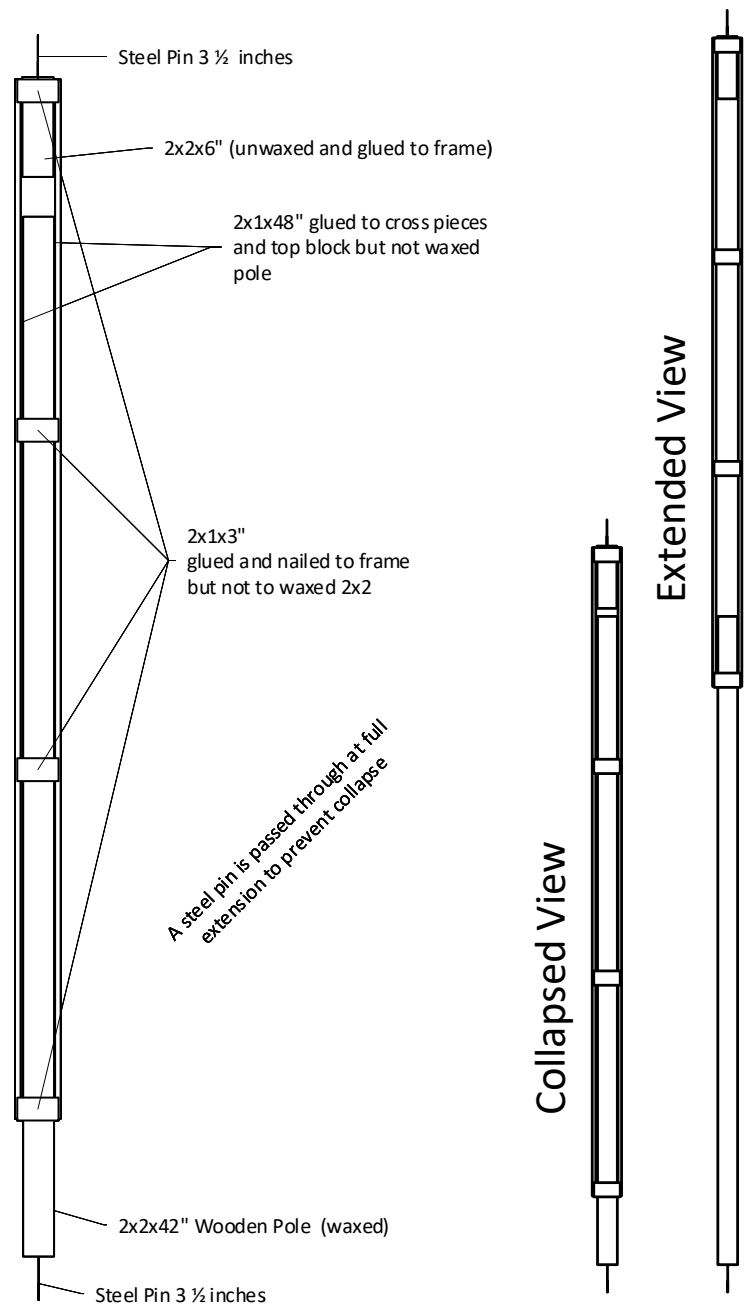
Support Poles

The original fly I am copying used solid wooden poles (2" dowels) with metal pins (actually 10 penny nails with heads) on the top only. I think the dowels are likely more period correct than my approach but I needed something that was easy to transport and moving 12 eight foot poles without a truck was problematic. As a compromise, I adapted the design I used with my surveyors plane table to make collapsible wooden poles that can be shortened to fit in the trunk of my car or my small trailer.

I considered many options and finally landed upon this design as the simplest to build and maintain. Other options I considered were metal or wooden sleeves on solid poles (see photo below), traditional ridge poles and supports, and various bolted together solutions. All of these were rejected because they were either too difficult to source the materials for, too difficult to build in my garage, or just too difficult to maintain in the field. This solution *could* have been used by an enterprising engineer or craftsman of the 18th Century as there are no components or techniques of construction employed that rely were not available at the time, I just don't have any evidence that they were used. Nonetheless, my poles can be extended to 7 and 8 feet in length and then collapsed to 4 feet for storage and transport.

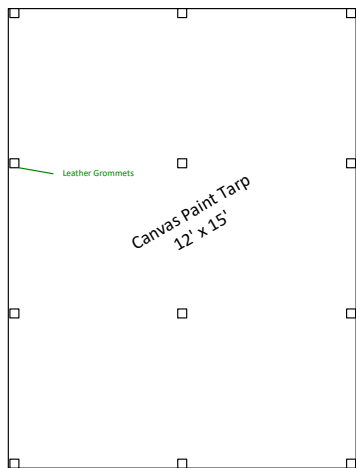
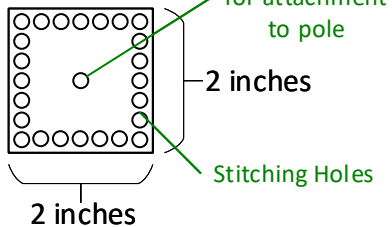
Components

- 2x2 Pressure Treated Lumber (cut to 42") – 12
- 1x2 Pressure Treated Lumber (cut to 48") – 24
- 1x2 Pressure Treated Lumber (cut to 3 ¼") – 48
- 2x2 Pressure Treated Lumber (cut to 6") - 12
- ¼" dowel (cut to 6") – 12
- 10-penny nails -- 24
- Finishing nails
- Glue



Fly Tent Construction

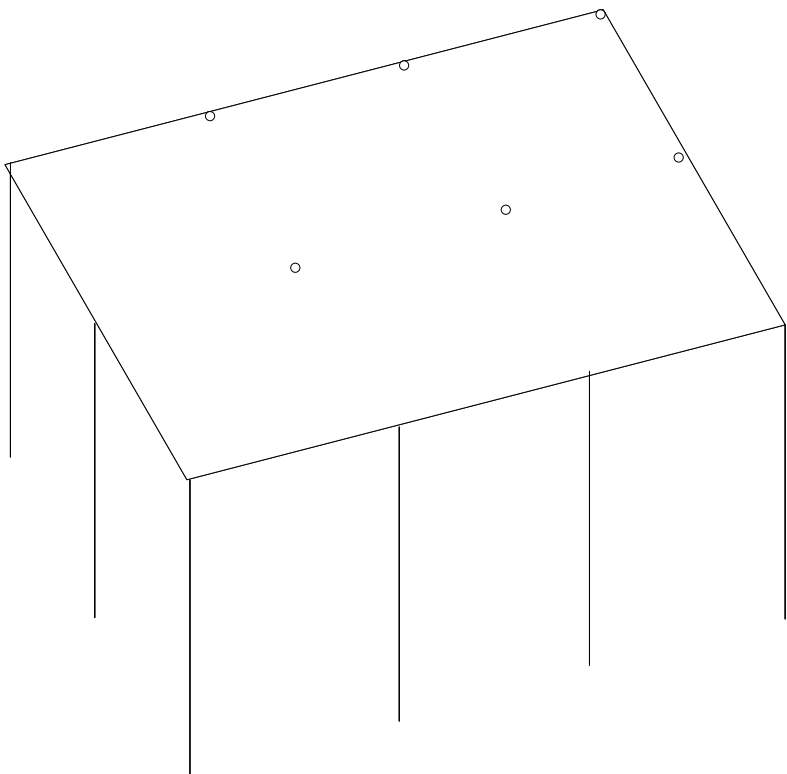
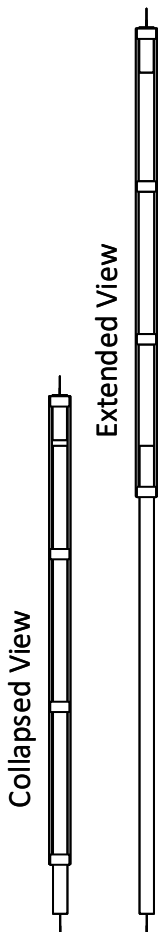
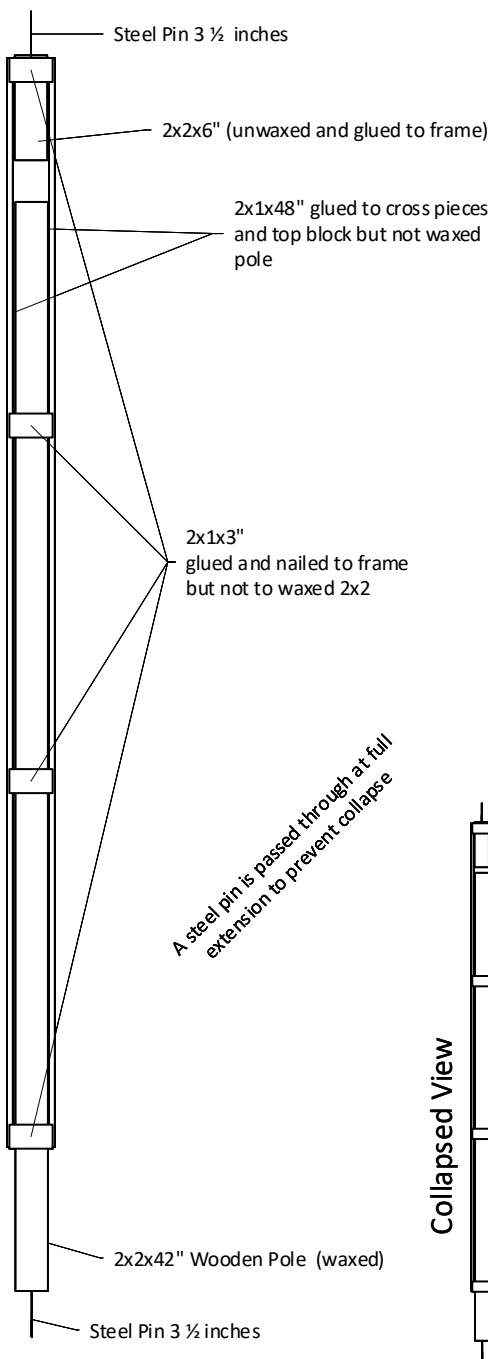
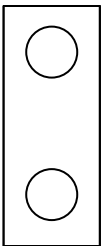
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