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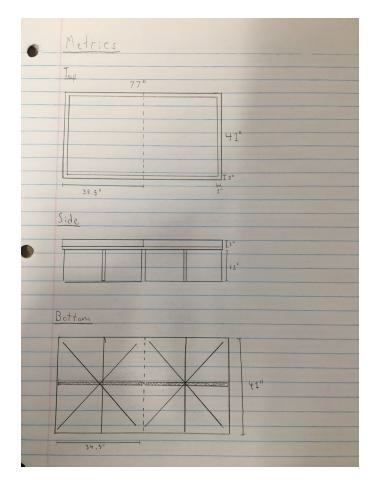
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## Project Deliverable F: Prototype 1 Double Star Design

Because the cardboard bed legs prove to be the most difficult aspect of the bed making, our prototypes will focus on different leg designs and their improvements on each other.

Our first leg design is the "double star". It consists of sideways cardboard sheets overlapping at the center to create a surface at which the top of the bed can lay upon. The sheets cross to form a star-like pattern. Our plan was to have one of these on each half of the bed, thus the name double star.



In the original theory, this leg design would work very well. The crossing of the cardboard spreads out the weight of a person laying very well. However, in practice, the design does not work. Because the cardboard sheets all cross at the mid point, each sheet only has a quarter of it's thickness at that point because there are four sheets crossing the same point. The result is the following:



A pile broken cardboard. The cross section immediately broke apart when minimal pressure was applied to it. To improve for the next time, we are going to make a design that does not use such a thin cross section area.