Introduction

Sixty six people were selected randomly and asked what they thought problems with current hammocks were. The single most important problem was identified to be stability, specifically fear of falling out. This was closely followed by comfort, ease of assembly, and price. Setting out with these specifications in mind, our radical new hammock stand design was born.

The Proposed Design

With our revolutionary design the hammock was made nearly impossible to flip, while still maintaining superb stability of the whole system. The stand as shown on the left was designed in order to withstand reasonably large loads without collapsing or tipping. It also allowed for the suspension cross beams as shown on the right to be hung from overhead. The hammock can then be hung from four points instead of two. These four ropes then converge overhead at a single point, making it impossible to flip.

Evaluation of Current Products

Upon examination of the Kelsyus Portable Hammock, it became obvious why fear of falling was such a major issue. The problem with this hammock stand, as well as all others on the market, is that the hammock hangs from two points in parallel with the user's body. This creates an axis of rotation about which the hammock can flip, causing the user to fall out.

Additional Features

Stability isn't the only great feature of this hammock stand however, it is also extremely simple to set up and take down for easy use anywhere. The entire frame is one collapsible piece that locks into place, allowing it to be set up in seconds. Simply attach the tension ropes for added stability, place the cross beams on the top hook, and hang up the hammock. You are now ready to relax in luxury.

Conclusion

Our innovative design beat out the leading competition in almost all fields. The main concern of stability was improved by incredible margins without sacrificing other key features. Not only were capsizing load, and max load both increased from our competition, but the bend angle induced on the spine was decreased, allowing for more comfort. The benchmark hammock flipped after moving the mass only 20 inches from the axis of rotation, while our model is impossible to flip. All this was done with a minimal cost increase of only ten dollars, making our design a clear competitor.

Acknowledgments

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References

Kelsyus Hammocks