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Squeaver

Overhanging limbs pose a threat to many homeowners with trees in their yard. If these limbs fall, property damage and personal injury are a major possibility. Currently the two methods used to cut and remove these limbs are hiring a tree service to use a boom truck to lift an arborist up to the limb or having a tree climber cut and lower the limb. Both methods are unsafe and expensive. Our design will be a tree-trimming device that can be rented from an equipment rental facility and operated by the homeowner. The machine will have the capability to extend a boom out to 75 feet to grab and cut limbs in small, manageable sections and safely lower them individually to the ground. Due to the scope of the overall machine, our project will be focusing on the cutting and lowering apparatus and its articulation at the end of the boom. We have constructed a functioning prototype to test the proof of concept. Our prototype was designed to grab, cut, and lower limb sections up to 12 inches in diameter weighing up to 125 lbs.