BOMBS C.C.

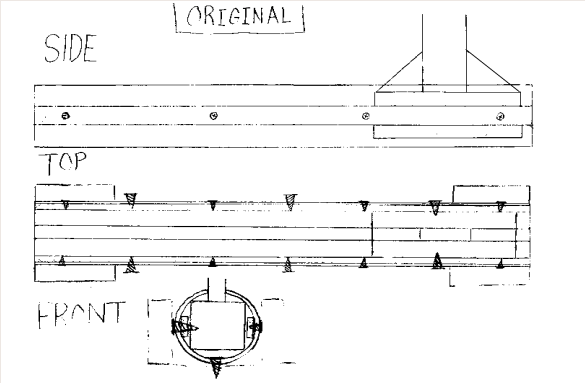
Group Members

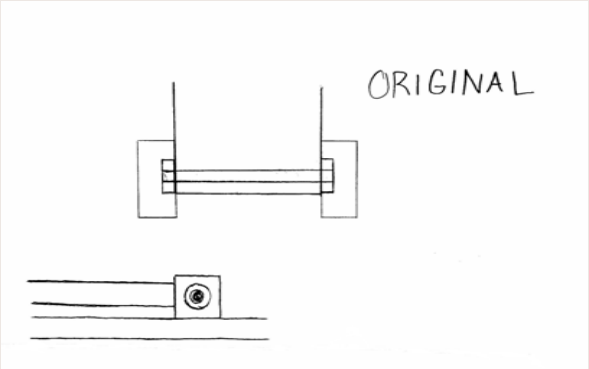
- **B**rett Gleasman
  - Group Leader
    - Introduction
    - Problem
    - Conclusion
- **O**wen Clark
  - Design/Drawings
    - Design
    - Adjustment
- **M**att Holsopple
  - Design/Drawings
    - Base
    - Accuracy
- **B**rett Morris
  - Materials/Final Sketch
    - Radial Arm/Trigger
    - Final Product
- **S**teven Kovach
  - CADD Drawing/Assembly
    - Assembly
    - CADD Drawing

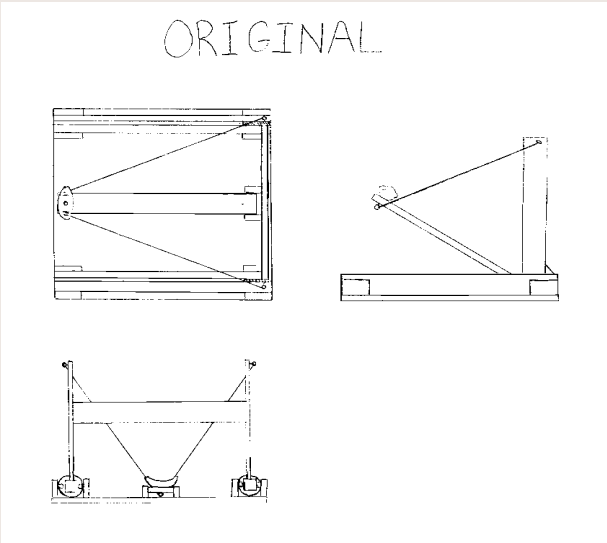
Problem

The Problem was to design a Catapult that would fire a 50 gram object 3 meters and hit a target that is 20 inches off the ground. The Catapult had to fit in a box that was 1.5 $feet^3$. We had to be able to design the Catapult to be able to change on the needs of trajectory and distance to hit the target in the bull's-eye.

Design







Assembly

- November 5th
- Steven Grandfather's Garage
- Tools Used
  - Table Saw
  - Drill/Screw Driver
  - Chop Saw
  - Sander
  - Staple Gun
- 4 Hours of Building Time

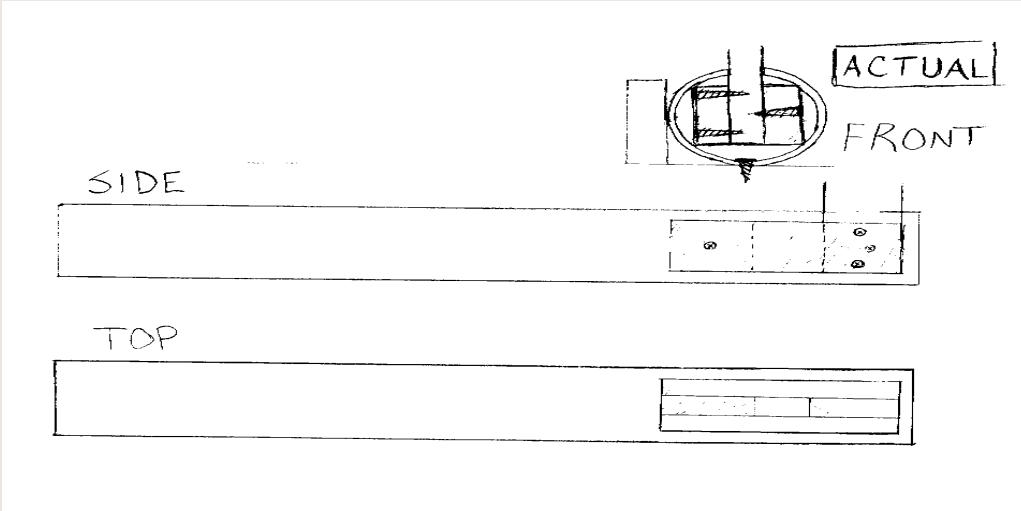
- Materials
  - 2x2 8ft $2.50
  - 1x3 8ft $2.00
  - 2'x2' plywood Base $4.00
  - 5ft 2in PVC Pipe $5.00
  - 8ft Molding $1.00
  - Screws/Medical Tubing/Labor/Hinge/ Carpet liner $Free

Base

- Materials
  - Rubber matting
  - 1.5ft^2 Plywood Base
  - 10lb Plate
- Reasons
  - Stability
  - Safety

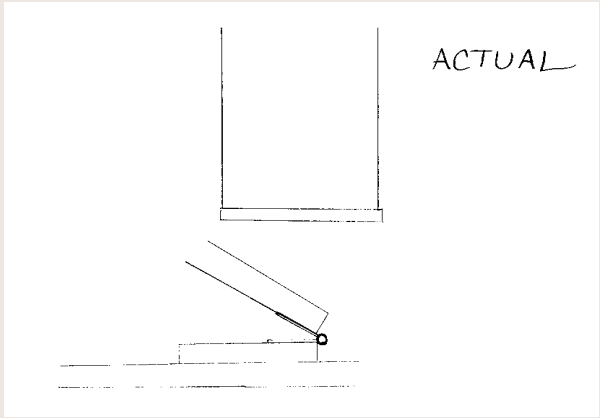
Adjustment

- Materials
  - PVC Pipe
  - 2x2 Wood
  - 1x3 Wood
  - Padding
- Reasons
  - Angle
  - Distance
  - Safety
- Changes

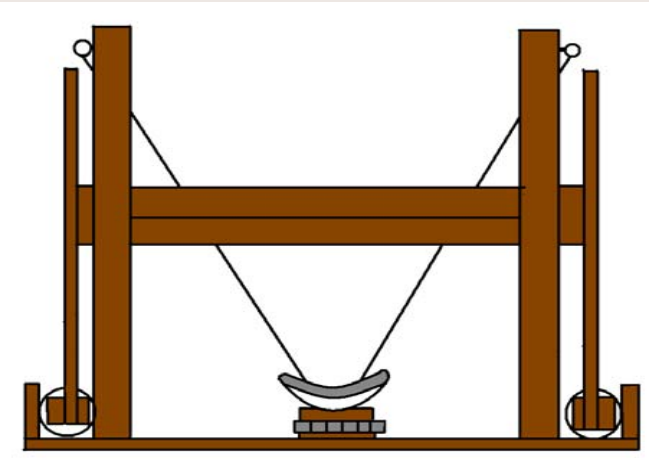


Radial Arm/Trigger

- Materials
  - Chinstrap
  - Hinge
  - 1x3 Wood
  - Eye Screws
  - Nail
  - String
  - Medical Tubing
- Reasons
  - Stability
  - Safety
  - Reliability
- Changes

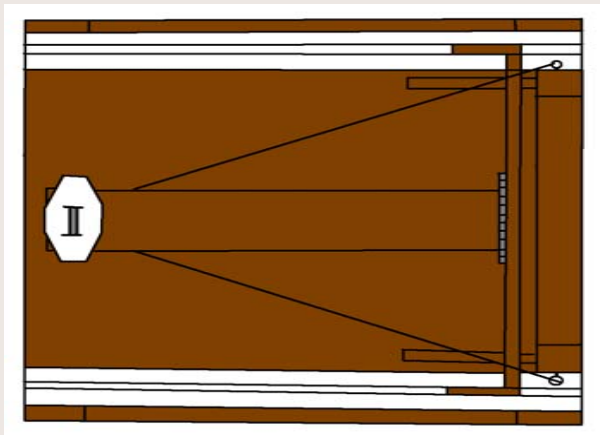


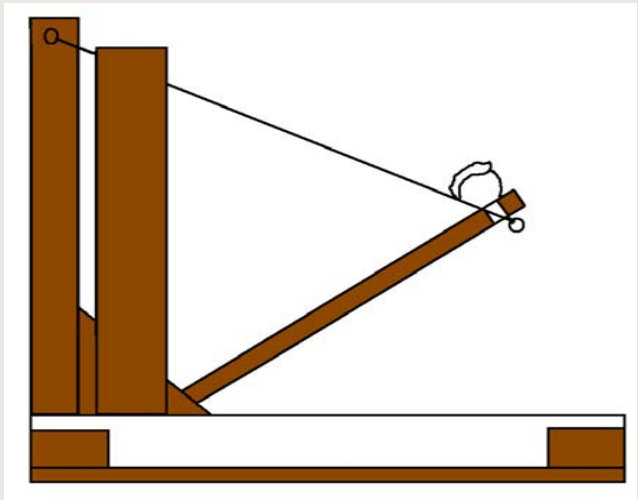
CADD Drawing



Front

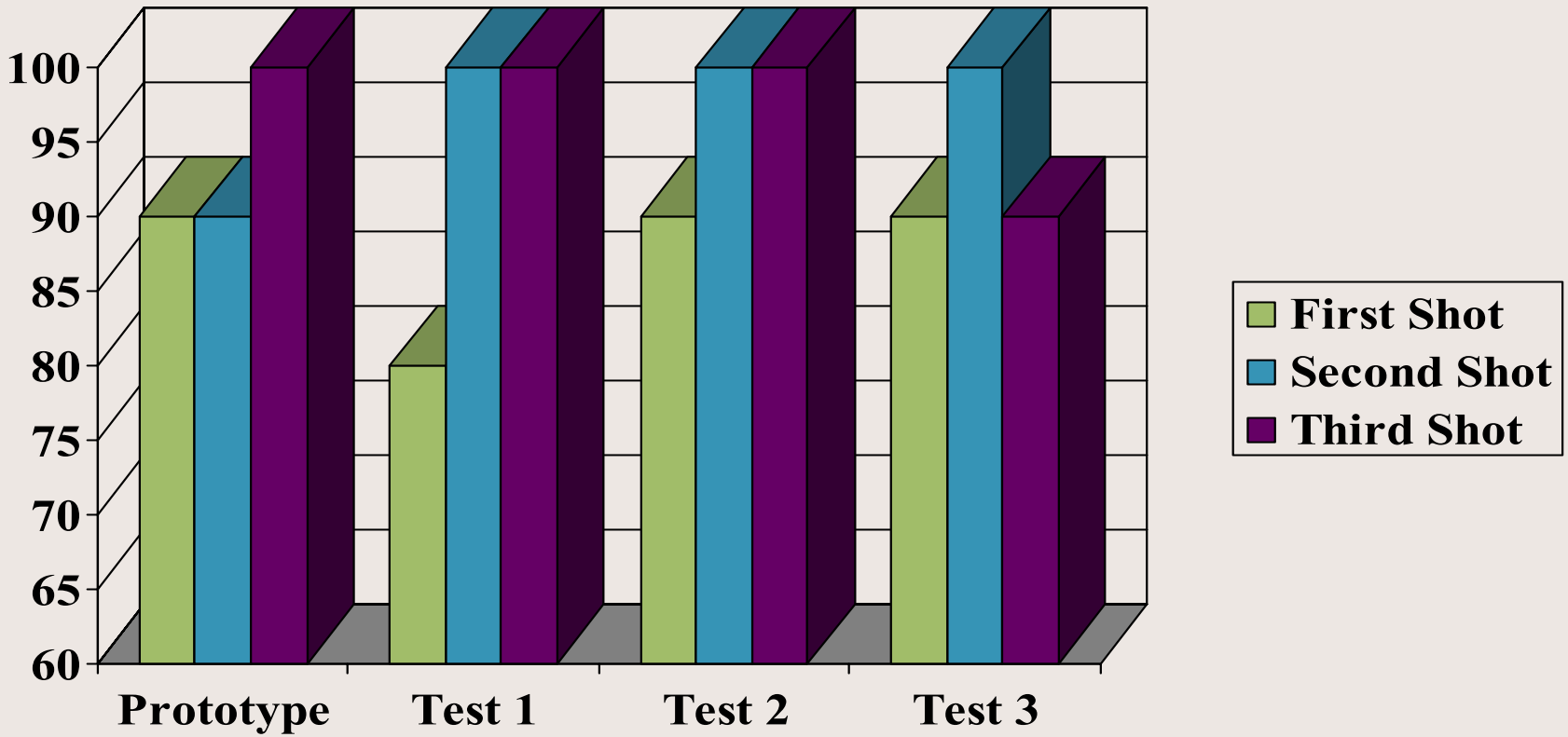
Top



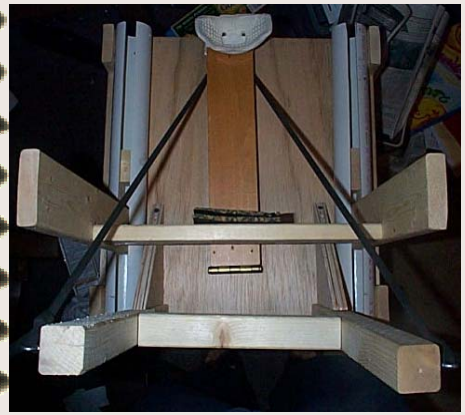


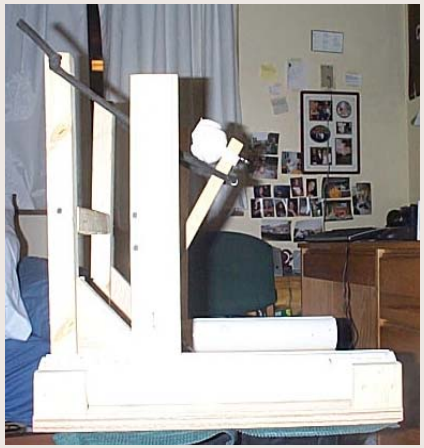
Side

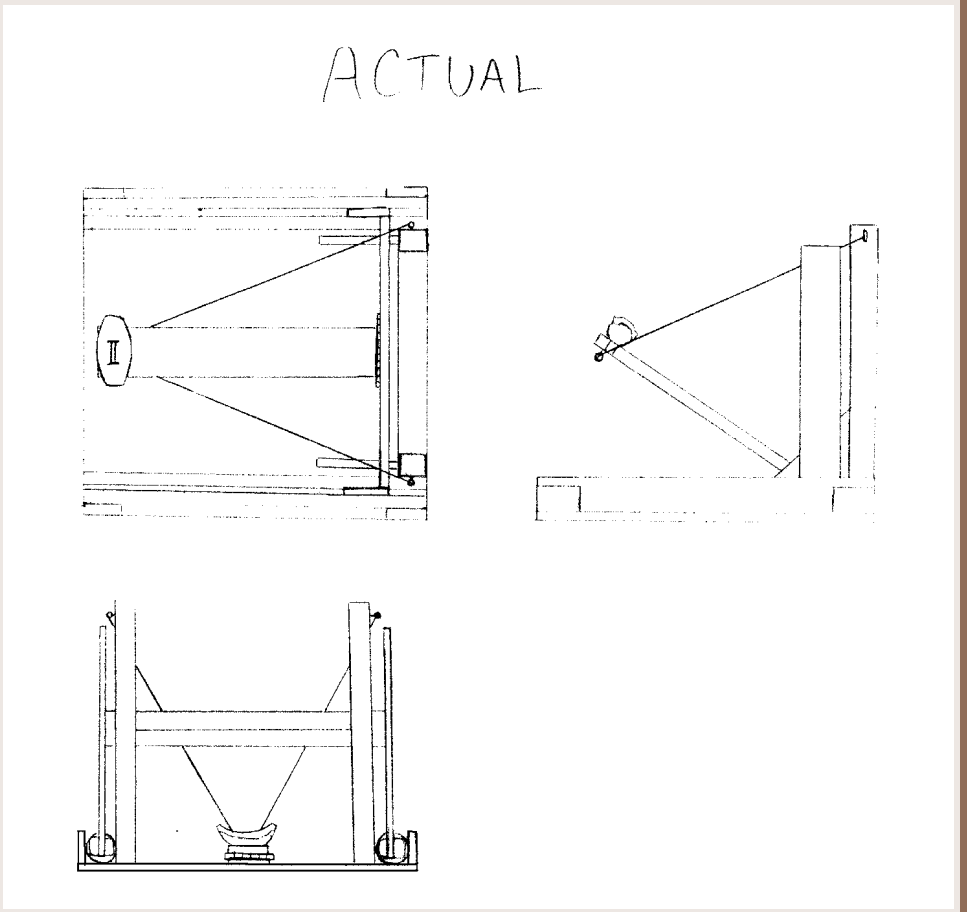
Accuracy

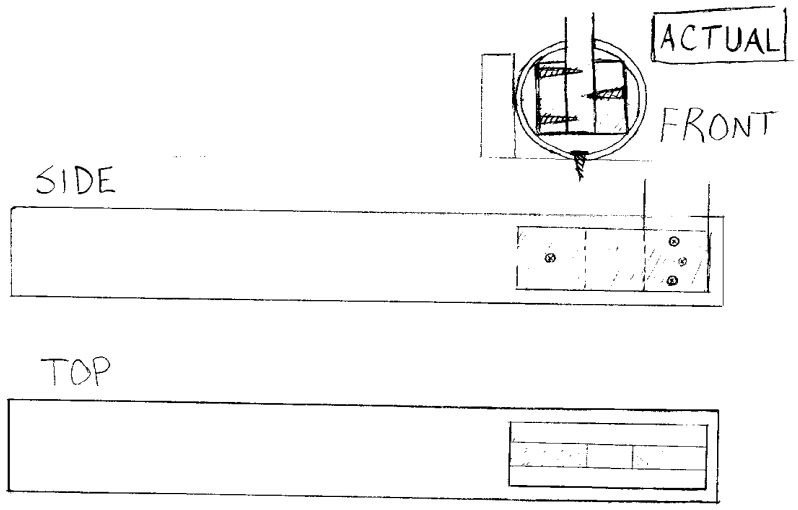

100
95
90
85
80
75
70
65
60
Prototype
Test 1
Test 2
Test 3
First Shot
Second Shot
Third Shot

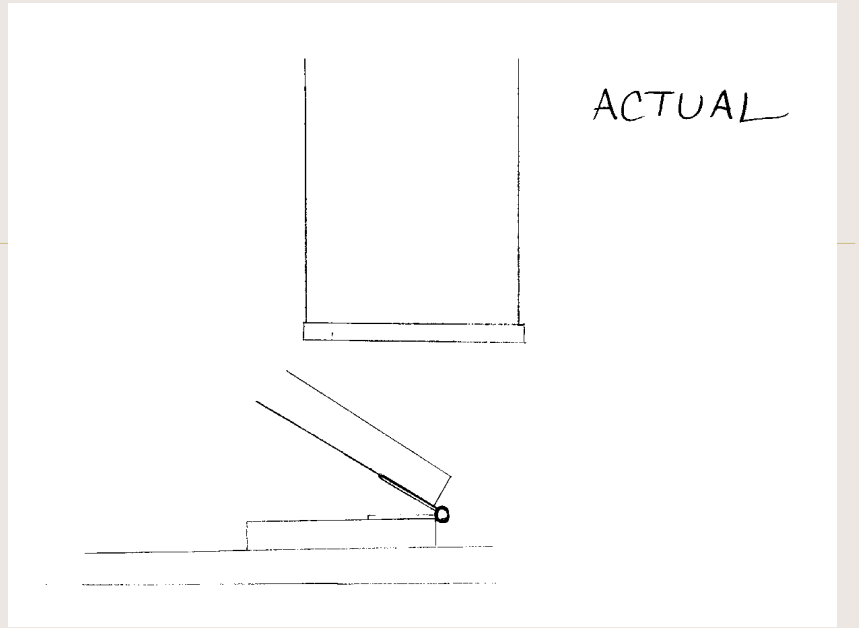
Final Product








ACTUAL
FRONT
SIDE
TOP


ACTUAL

Conclusion

For this problem of hitting the target consistently with accuracy we made the final product by going through the process that was stated.

Questions

B O M B S