

Group M1.03 – Sustainable Heritage in Landa Park Miniature Golf

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Sponsor: New Braunfels Parks and Recreation, direct contact is Ylda Capriccioso.

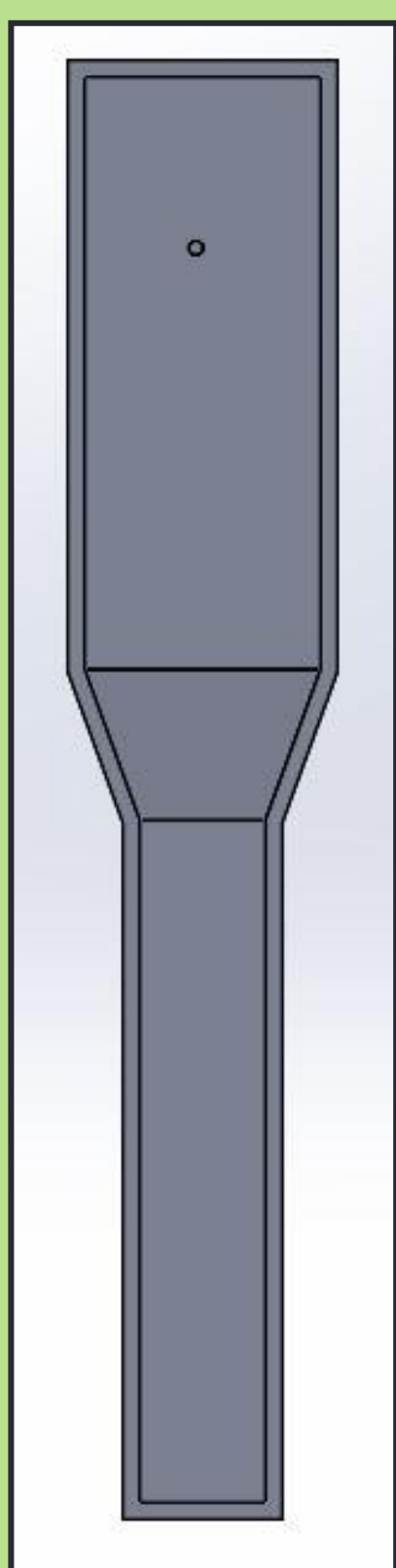
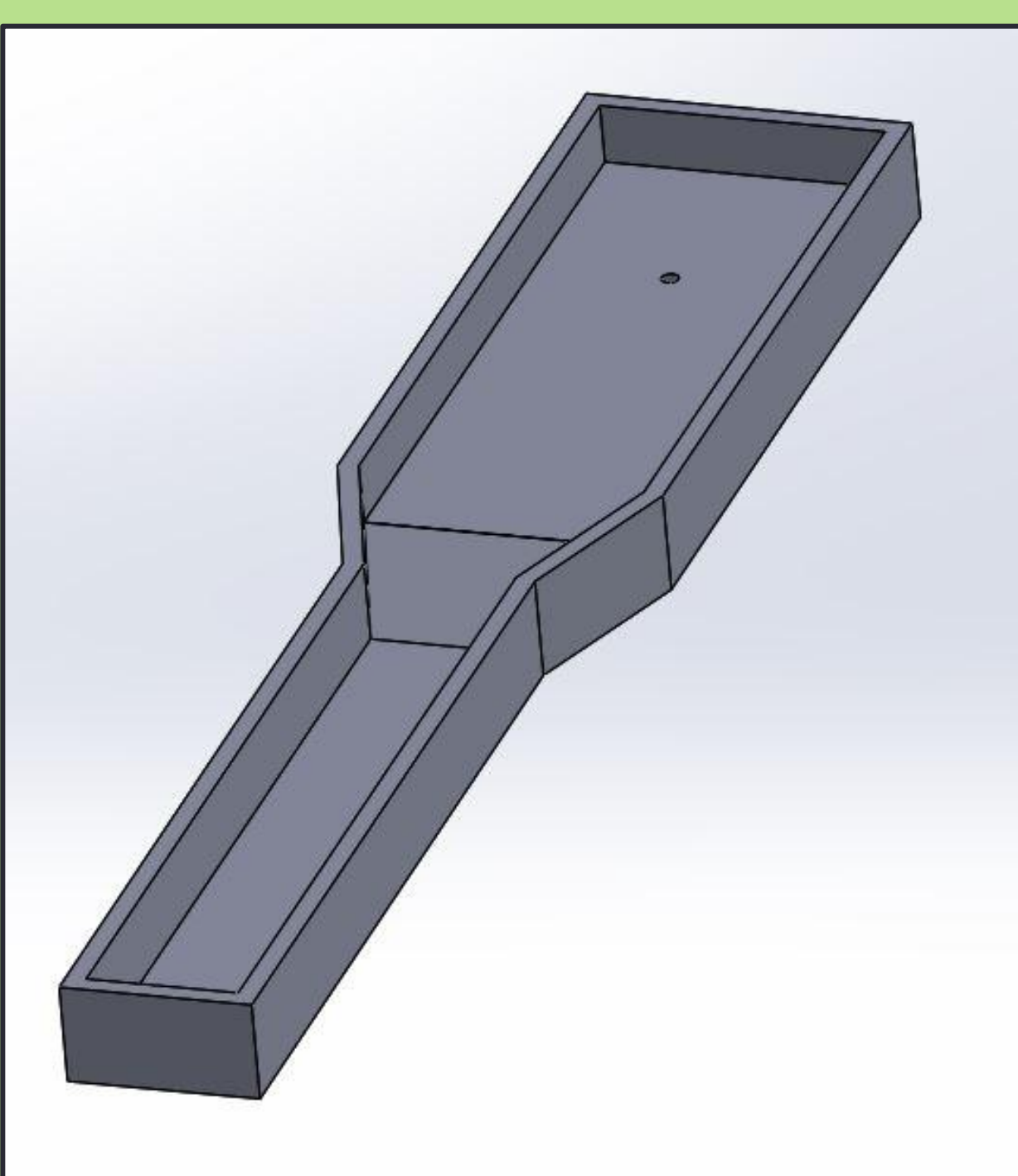
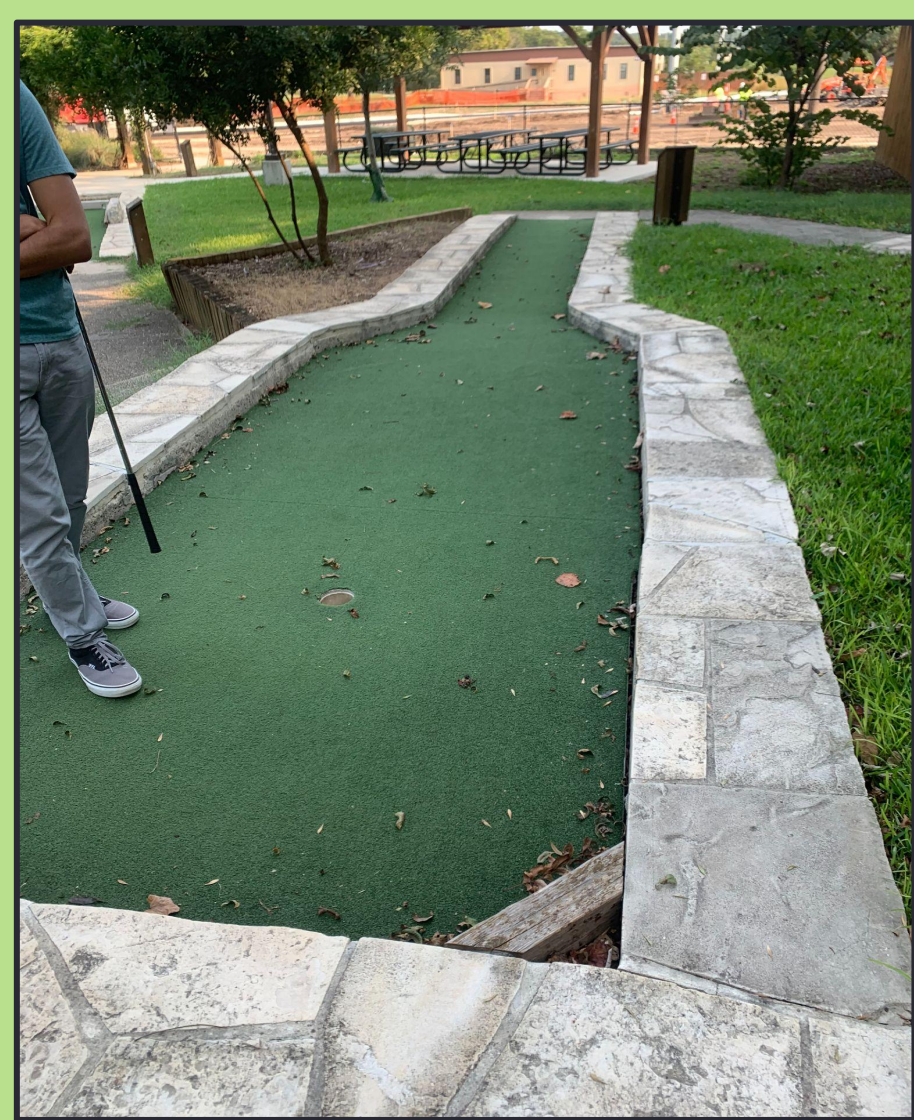
Project Description

Business / Customer Needs

- Add a design to a featureless hole at the Landa Park Mini Golf Course.
- Reflect culture and heritage of New Braunfels.
- Require little to no maintenance for the next 25 years.
- Ensure safety for all ages.
- Have a hole-in-one opportunity.

Hole 17

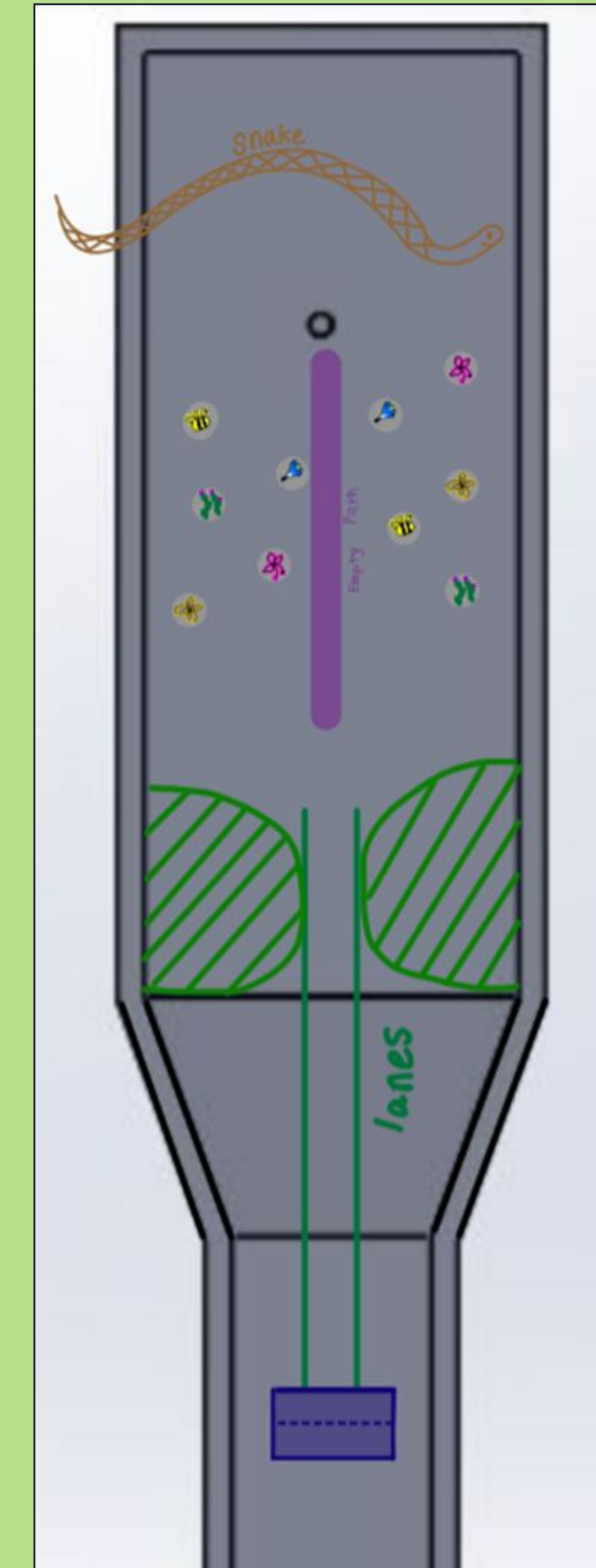
- This hole does not need to be ADA compliant.
- Ordinary straight hole with a slight incline.



Final Design / Process

Lindheimer Home

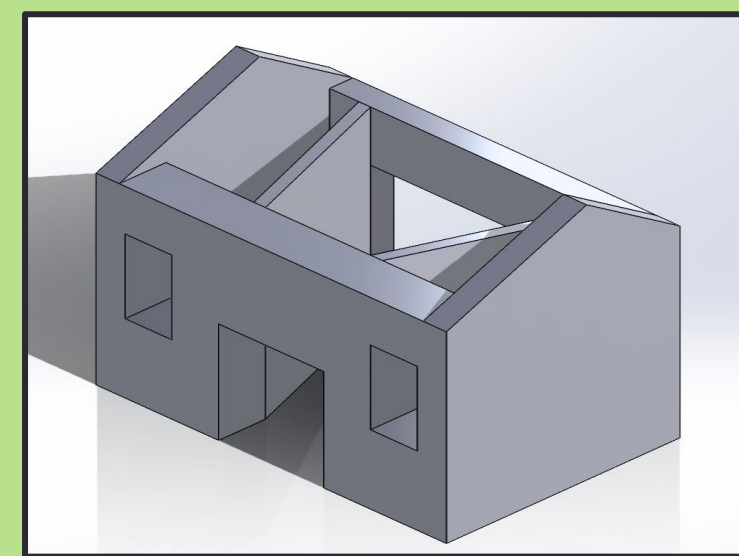
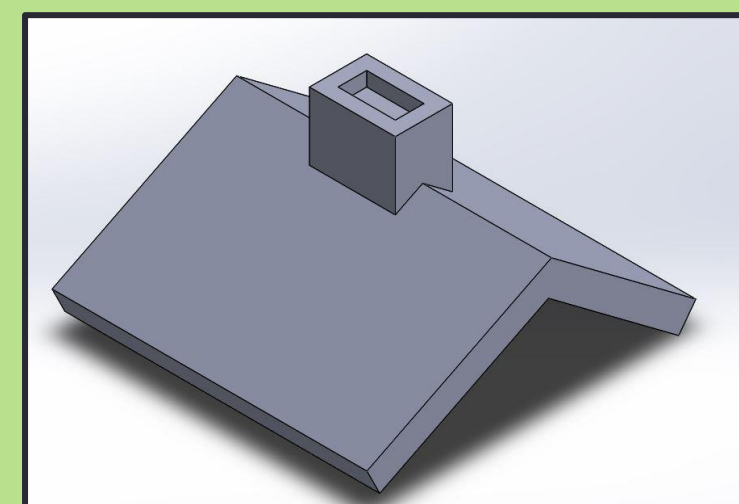
- Replica of his home, the user has an option to go through or around.
- Steel walls, cut using CNC.
- CNC engraved details.
- The roof will have the image of Lindheimer and the German newspaper he edited etched on it.
- Lanes added to ensure balls that go through the house will stay straight towards hole.
- Valley after house made of concrete and covered in green.
- Weld each side together and bolt to concrete.



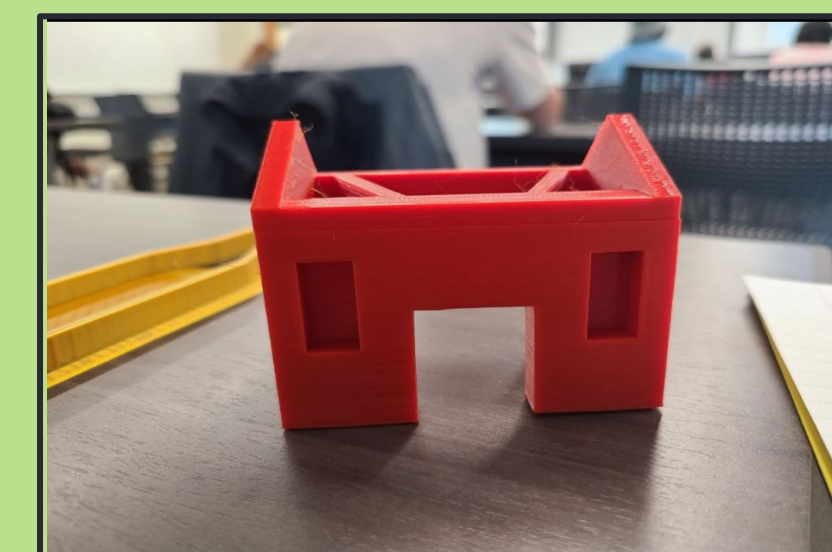
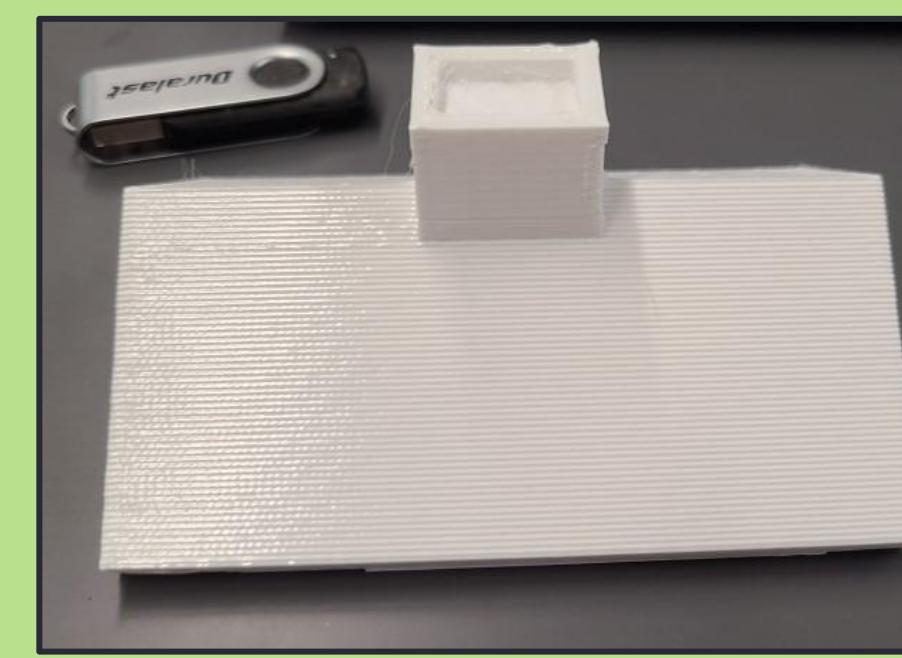
Flower Garden

- Flowers discovered by Lindheimer.
- Dried flowers encapsulated in UV resistant Clearcast.
- Attach resin flower domes to flat surface for installation.
- Etch common and scientific names at base.
- Also acts as potential obstacles.

3D CAD Model for Lindheimer Home



Prototype for House



Processing 3D Model Of Hole 17



- Craftbot XL used to produce prototype.

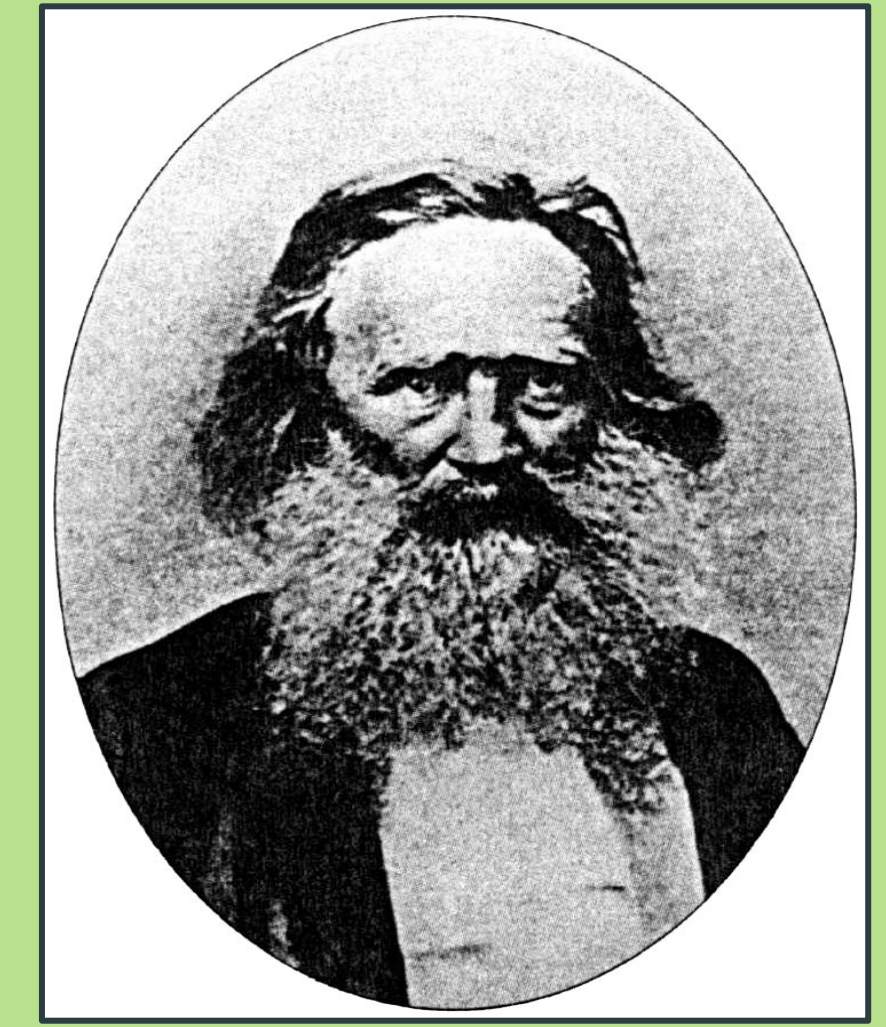
Lindheimer Home



Texas Rat Snake

- Discovered snake and named after him.
- The snake will be curved around the back of the hole to serve as a backboard, and a higher chance of a hole-in-one.
- CNC snake in two separate pieces.

Historical Significance



Ferdinand Lindheimer

- Known as the father of Texas Botany.
- Gathered over 1200 species of plants in Texas.
- Prickly Pear, White Guava, and Texas Rat Snake.
- Aided in importing Italian black bees to pollinate the area.
- Edited and printed the German newspaper, the Neu Braunfelser Zeitung.
- Original home still stands in New Braunfels.

Contributions to Botany



- Examples of specimen he discovered and collected.
- Flowers are an example of some used in garden.