Experiment to test strength of gripper finger

!!Placeholder images of an older design!!

To test the strength of the fingers of   
the gripper, we will mount the bottom/gear in a fixture and then apply a force on the tip of the finger. Where the torque on the finger will be  
at its largest.

We will be doing 4 test from different angles to evaluate the different cases of collision with the finger.

(1): Standard collision from closing on external diameter of a checkers piece.

(2): Collision when opening. I.e Gripping the internal diameter of a part.

(3): Collision when closing. I.e Gripping the external diameter that is larger than a checkers piece.

(4): Collision when moving down to collect piece.

There is also an argument to be made of collisions with a part in the gripper. But these are more complex and seen as out of the scope of the analysis.

**4**

**3**

**2**

**1**

**Green**: Force applied & measured with dynamic force cell  
**Red**: Fixture positioning  
**Black**: Reference lines