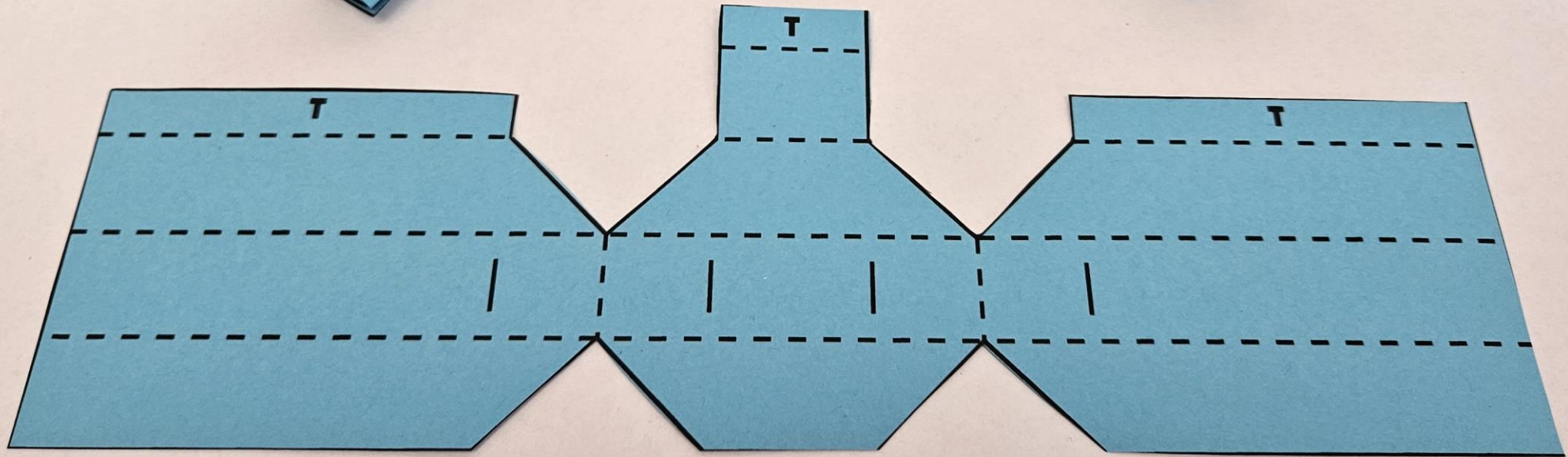
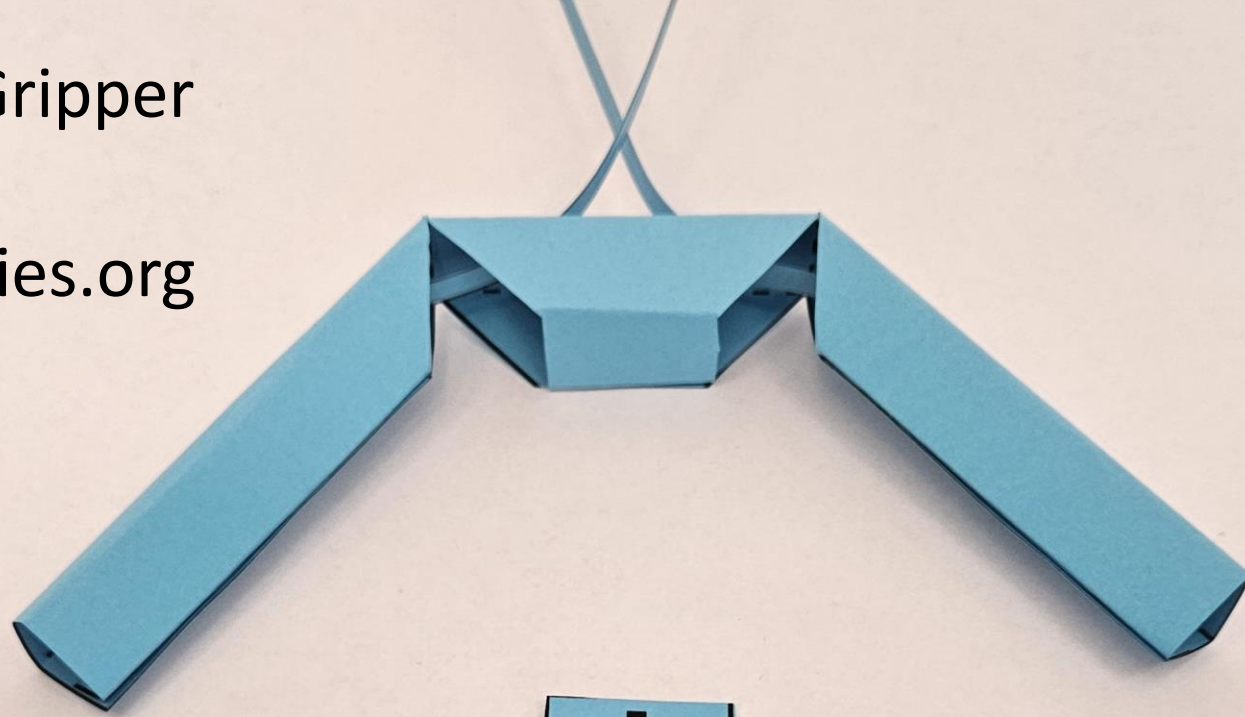
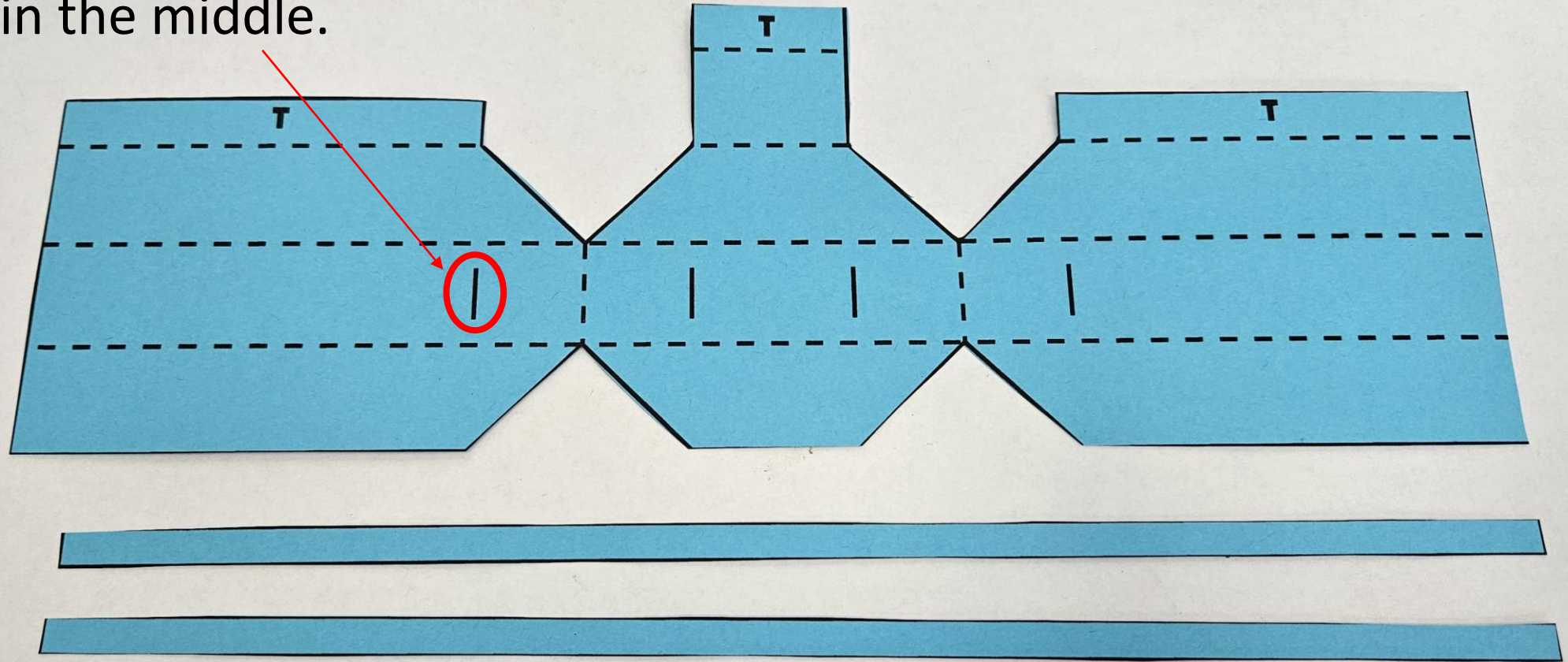


Foldable Robotic Gripper  
Assembly Steps  
[www.sciencebuddies.org](http://www.sciencebuddies.org)



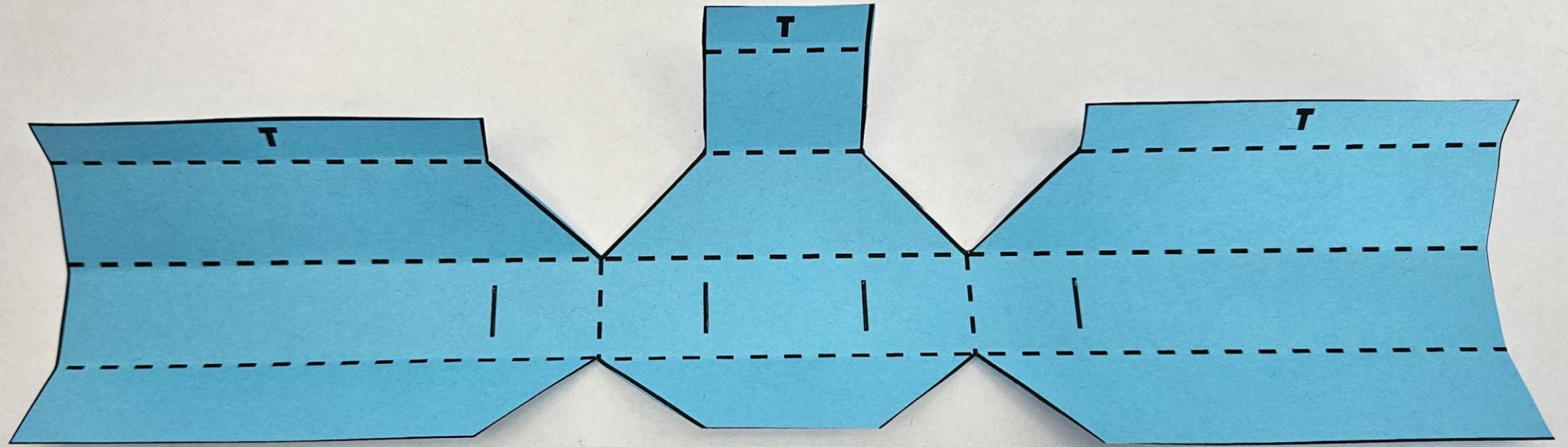


1. Print the template and cut out along the solid lines, including the slots in the middle.



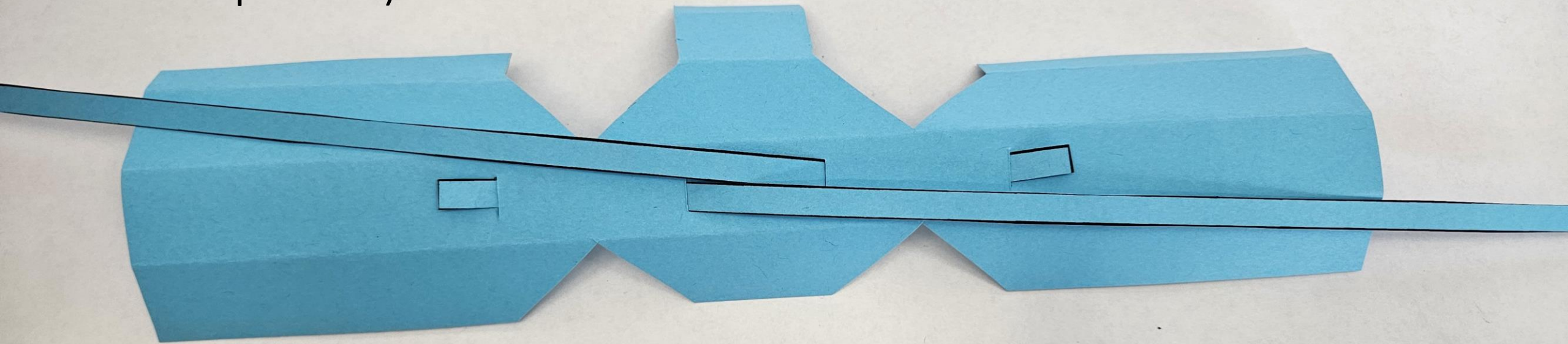


2. Fold and crease along the dashed lines, then flatten again.



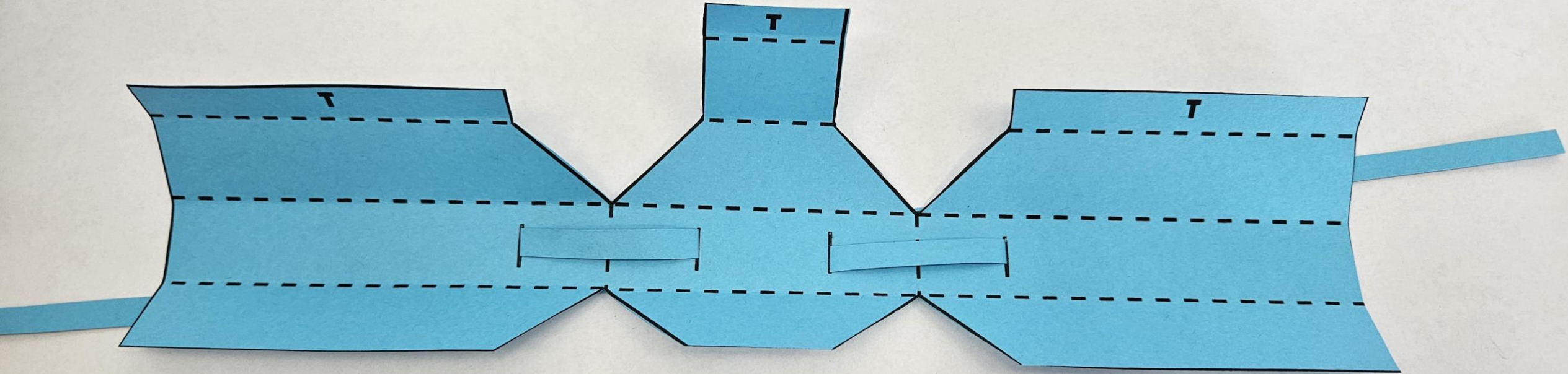


3. Flip the gripper over and thread the tendons through the slots from the back as pictured (next slides show additional pictures).

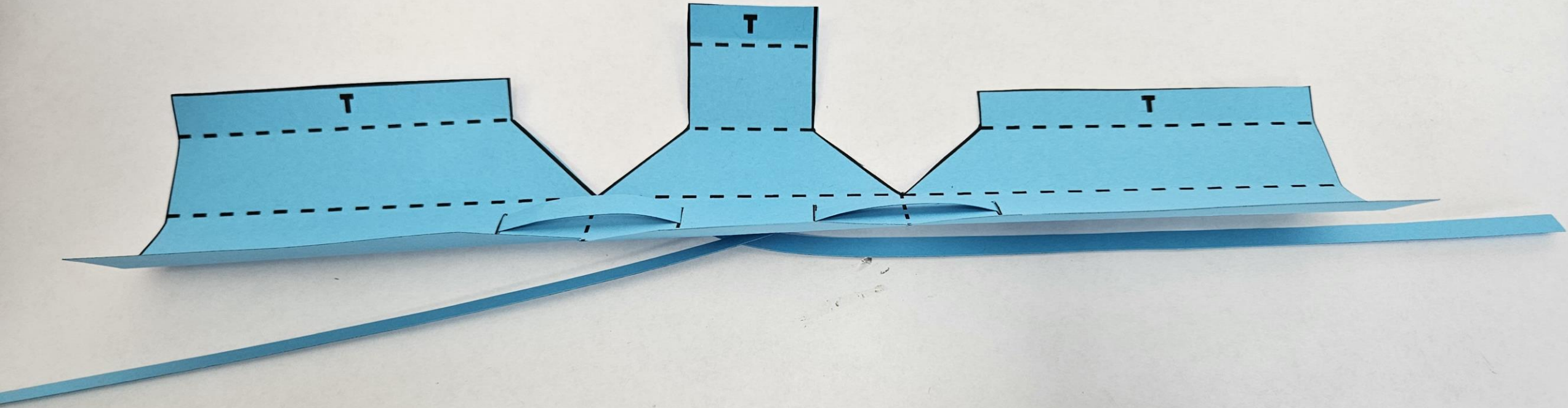




Front view of tendons threaded  
through the slots.

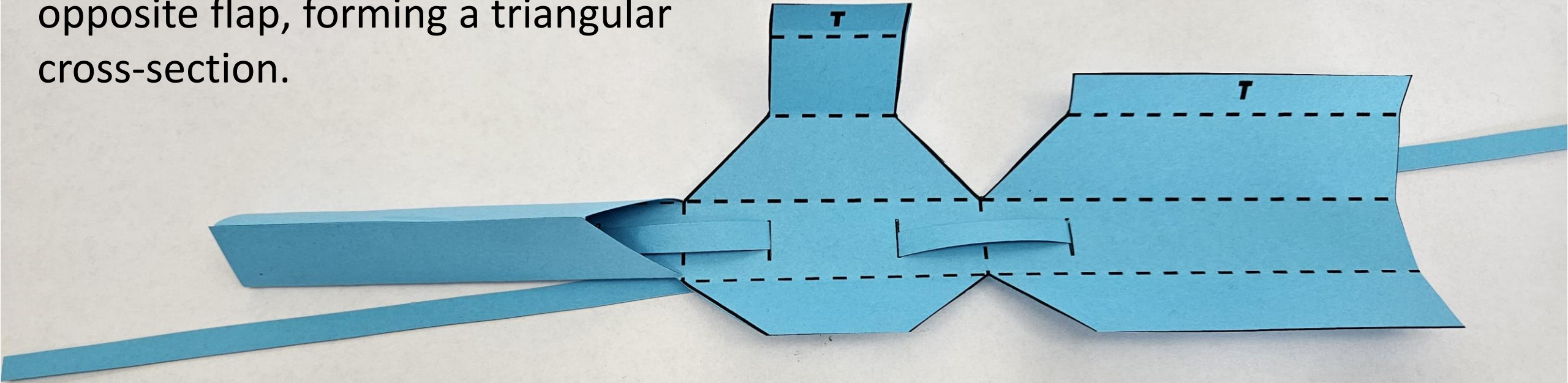


Side view of tendons threaded through the slots.

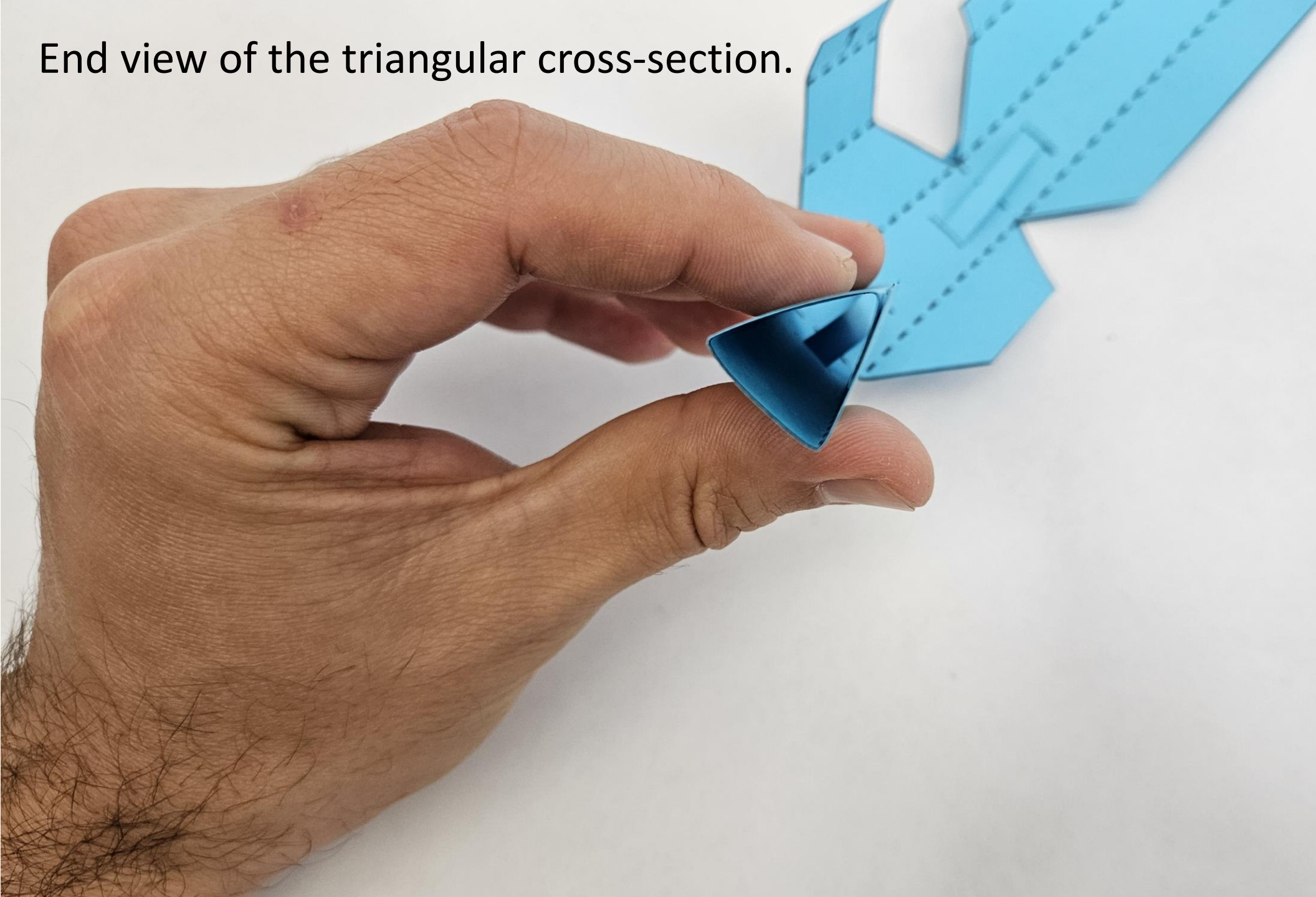




4. Apply glue to the tab (labeled "T") on one finger. Fold and glue it to the opposite flap, forming a triangular cross-section.

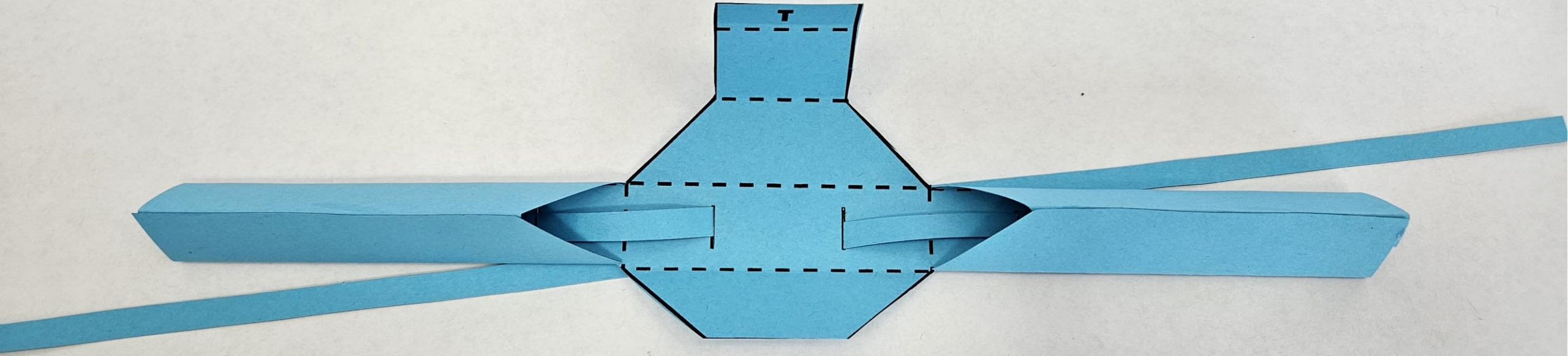


End view of the triangular cross-section.



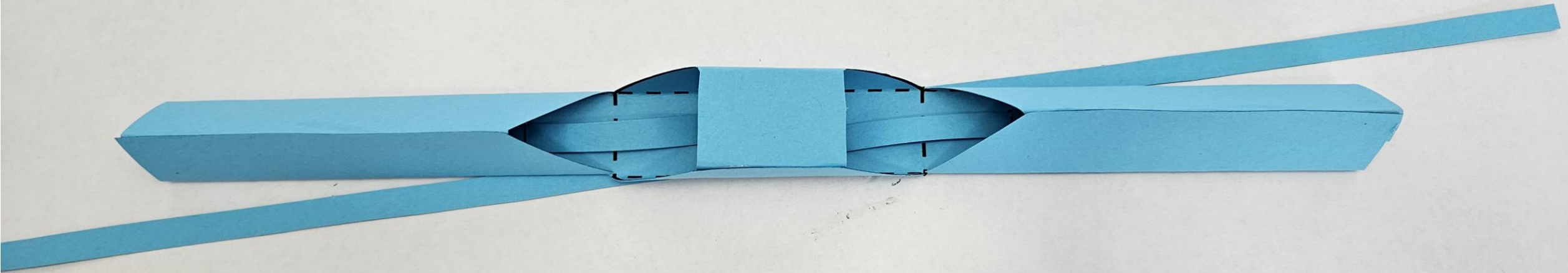


5. Repeat to glue the other finger.



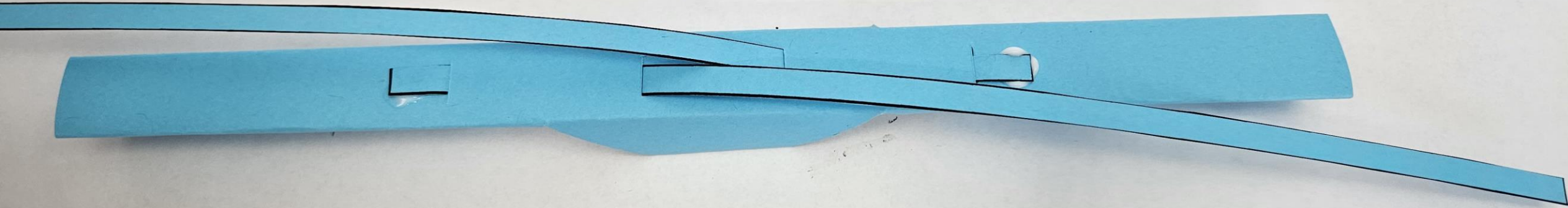


6. Fold and glue the center portion. It has a rectangular cross-section, not triangular.



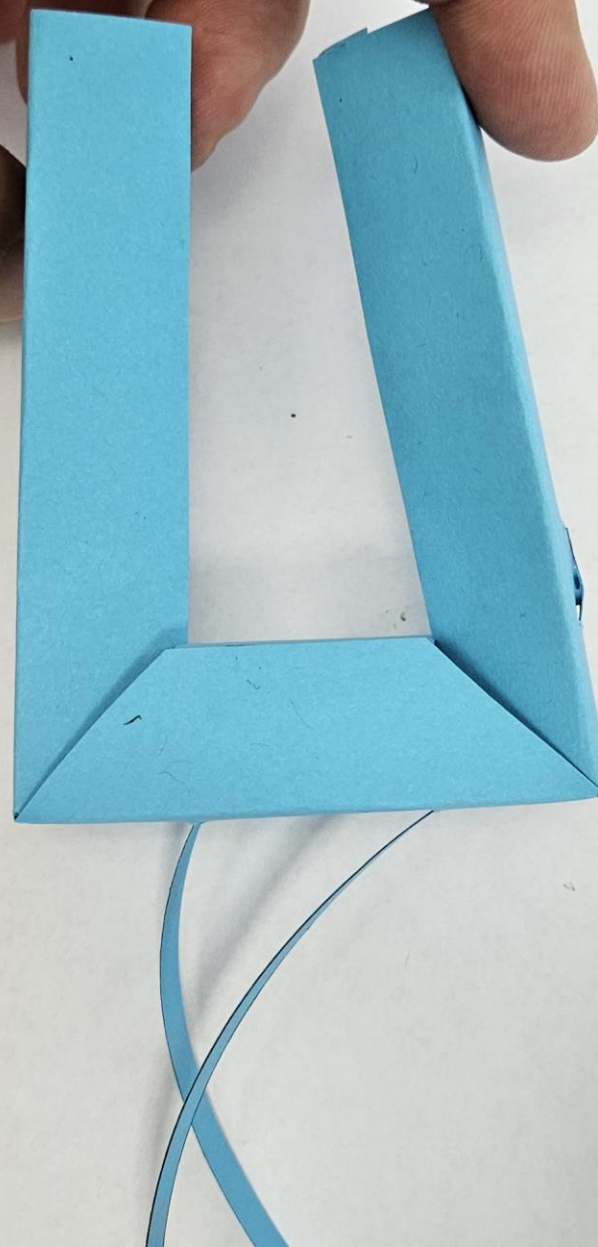


7. Glue the tendons in place on the back of the gripper.

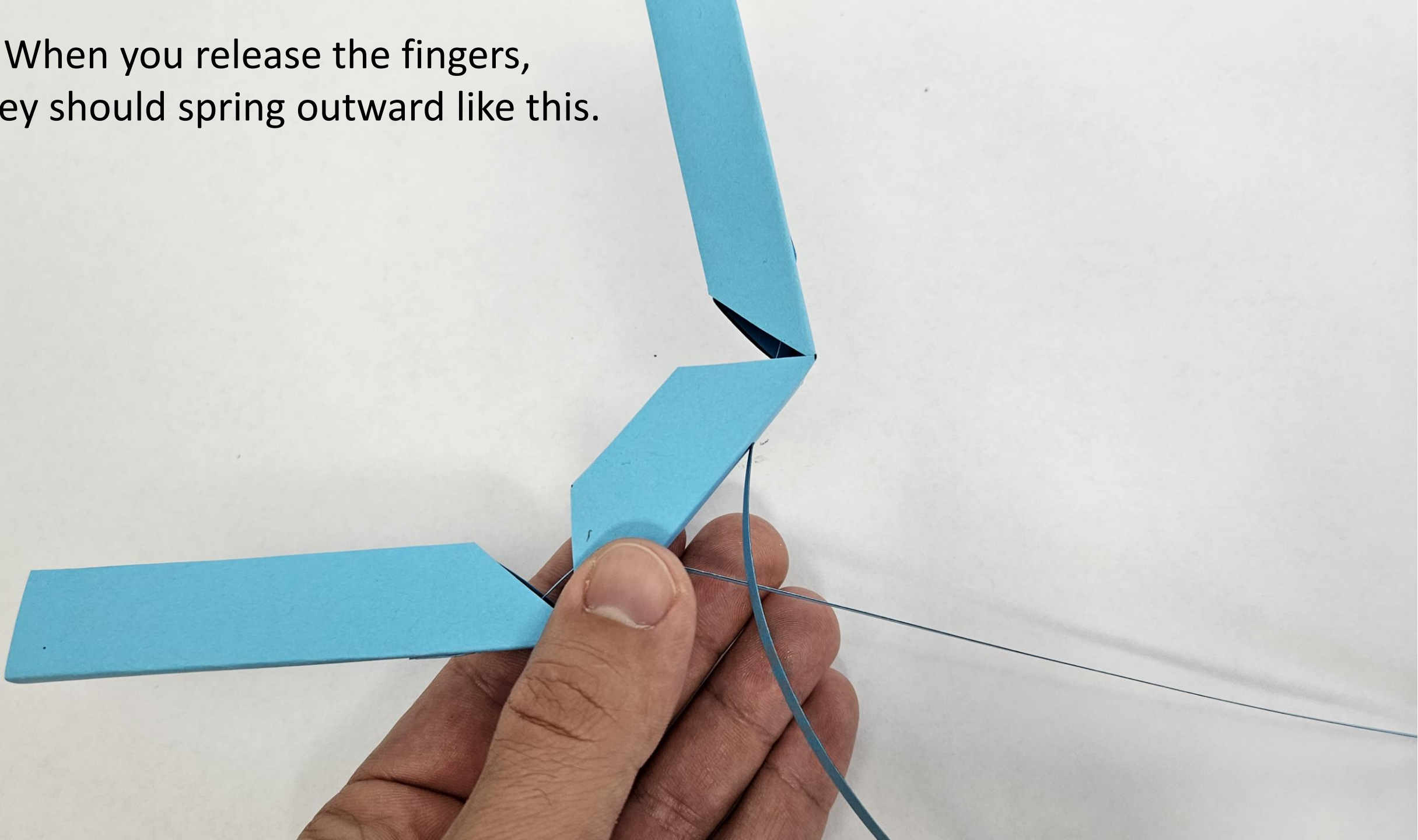




8. Fold the fingers up 90 degrees but do NOT glue them in place.

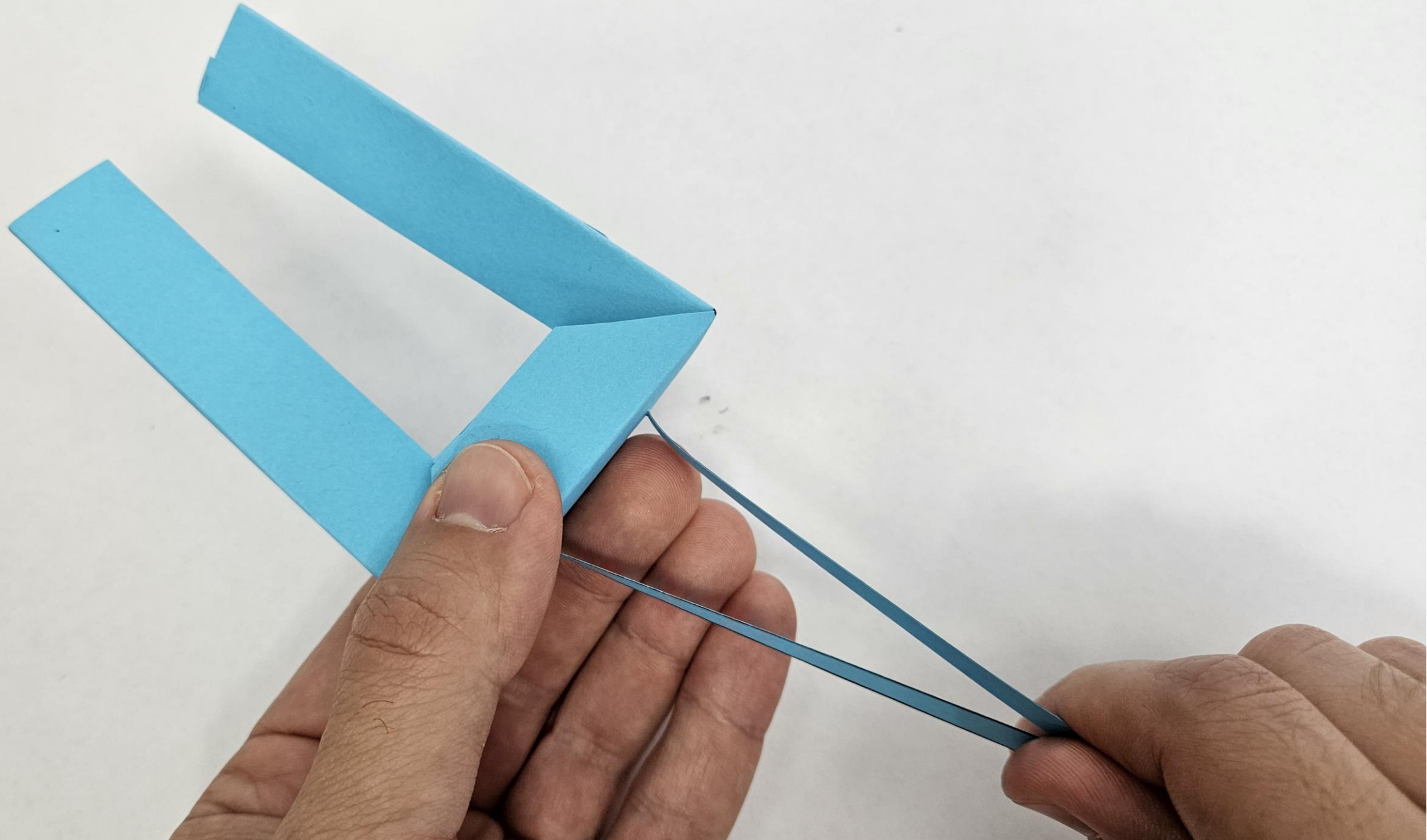


9. When you release the fingers, they should spring outward like this.





10. Pull on the tendons to pinch the fingers together.



11. Try using your gripper to pick things up!

