

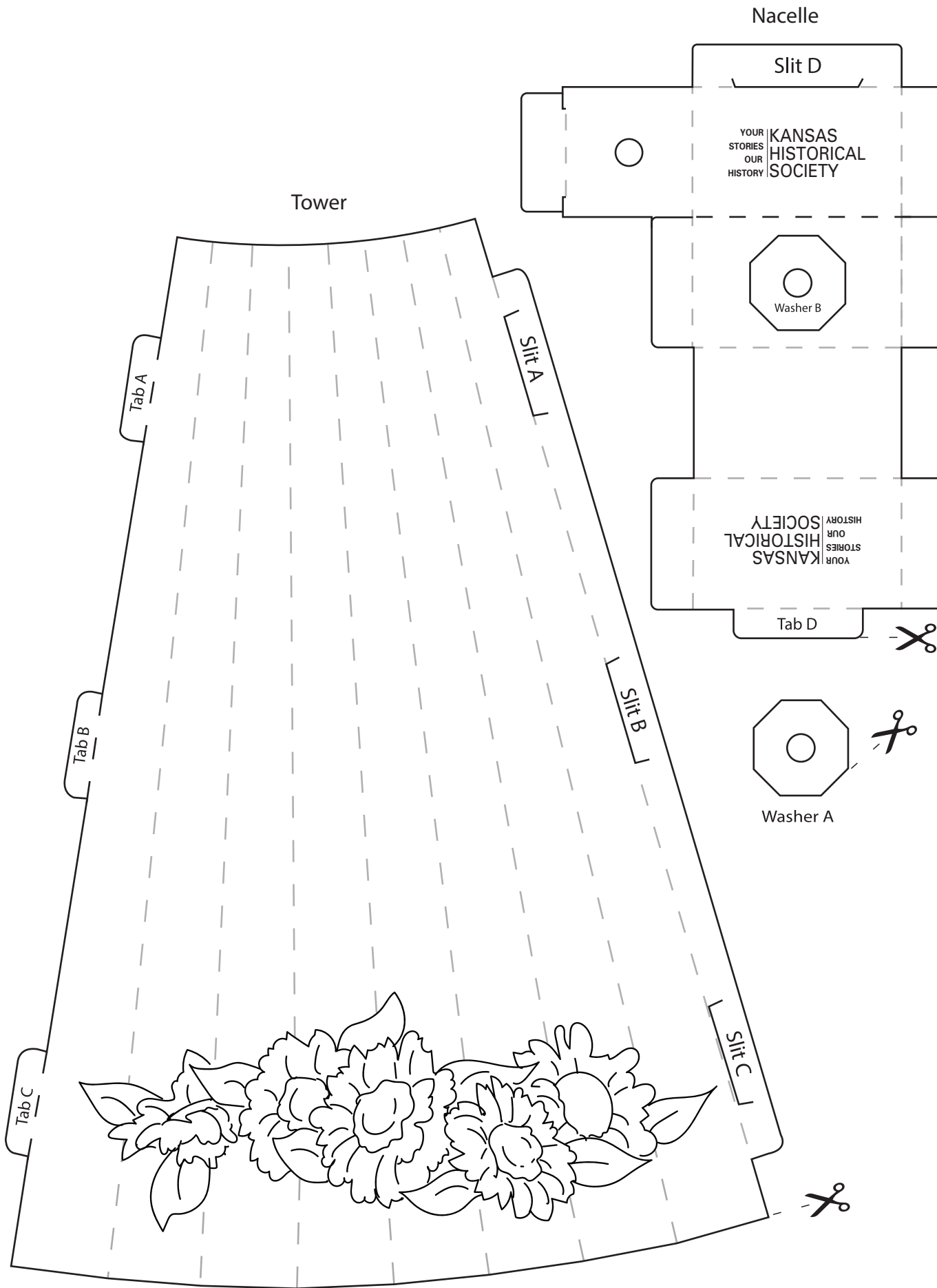
# WIND TURBINES

Modern wind turbines were adapted from windmills, which have been in use for thousands of years. On Kansas farms, windmills were used to pump water from underground reservoirs. Families and ranchers relied on windmills to provide water for their households and livestock, especially in Central and Western Kansas which experienced less rainfall.

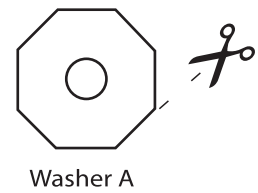
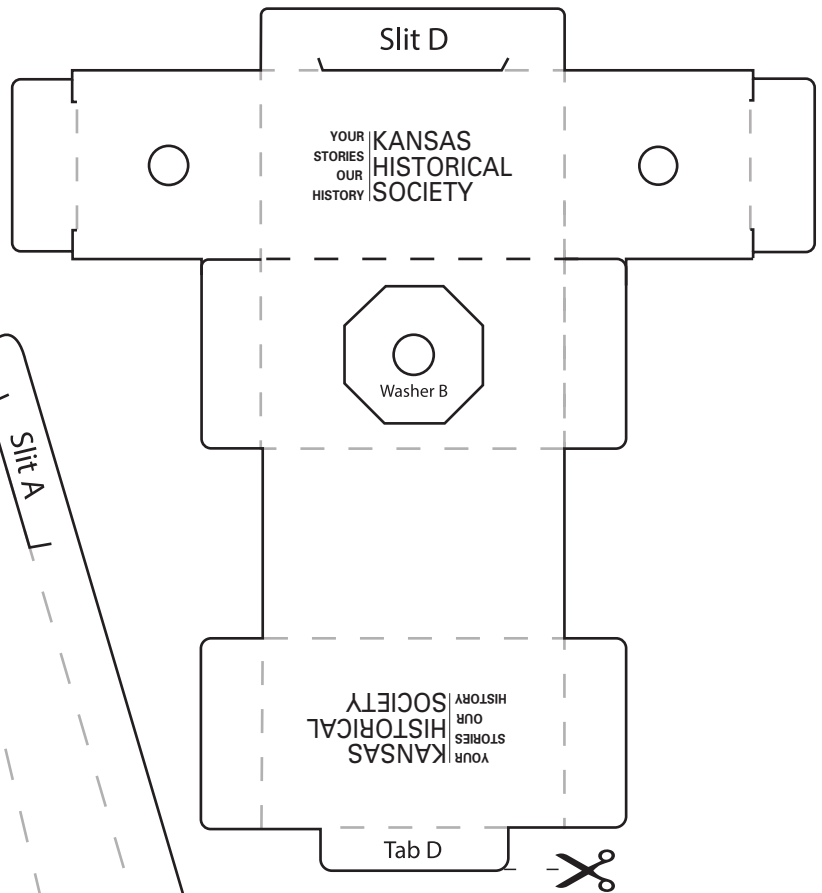
Windmill manufacturing decreased significantly as electricity and gasoline became cheaper alternatives. Interest in renewable energy saw a resurgence during the 1970s when oil prices began to spike. Over the past few decades, federal and state policies have been introduced that encourage the use of renewable energy. Government policies, continued research, and a growing push for the use of more sustainable energy sources have allowed wind power to grow exponentially in the United States.

The United States now ranks second in the world for total wind power capacity. In 2021, the United States' cumulative wind capacity grew to 136 gigawatts which is enough to power over 30 million homes. In Kansas, 45% of all in-state electricity generated came from wind power. Kansas is also one of the top 5 states in terms of total wind energy generation.





Nacelle



Washer A

## Instructions:

1. Roll and fold the Tower tightly with tabs on the outside. Slip Tabs A, B, and C into the slits.
2. Fold the Nacelle, slip Tab D into the slot, and fold the ends in to create a box, remove washer 1, and place Nacelle on the tower.
3. Place a 6cm length of plastic drinking draw into the holes at the front and back of the Nacelle.
4. Thread Washer 1 onto the straw from the front, then the Rotor in place, and finally Washer 2 to secure the Rotor in place.

