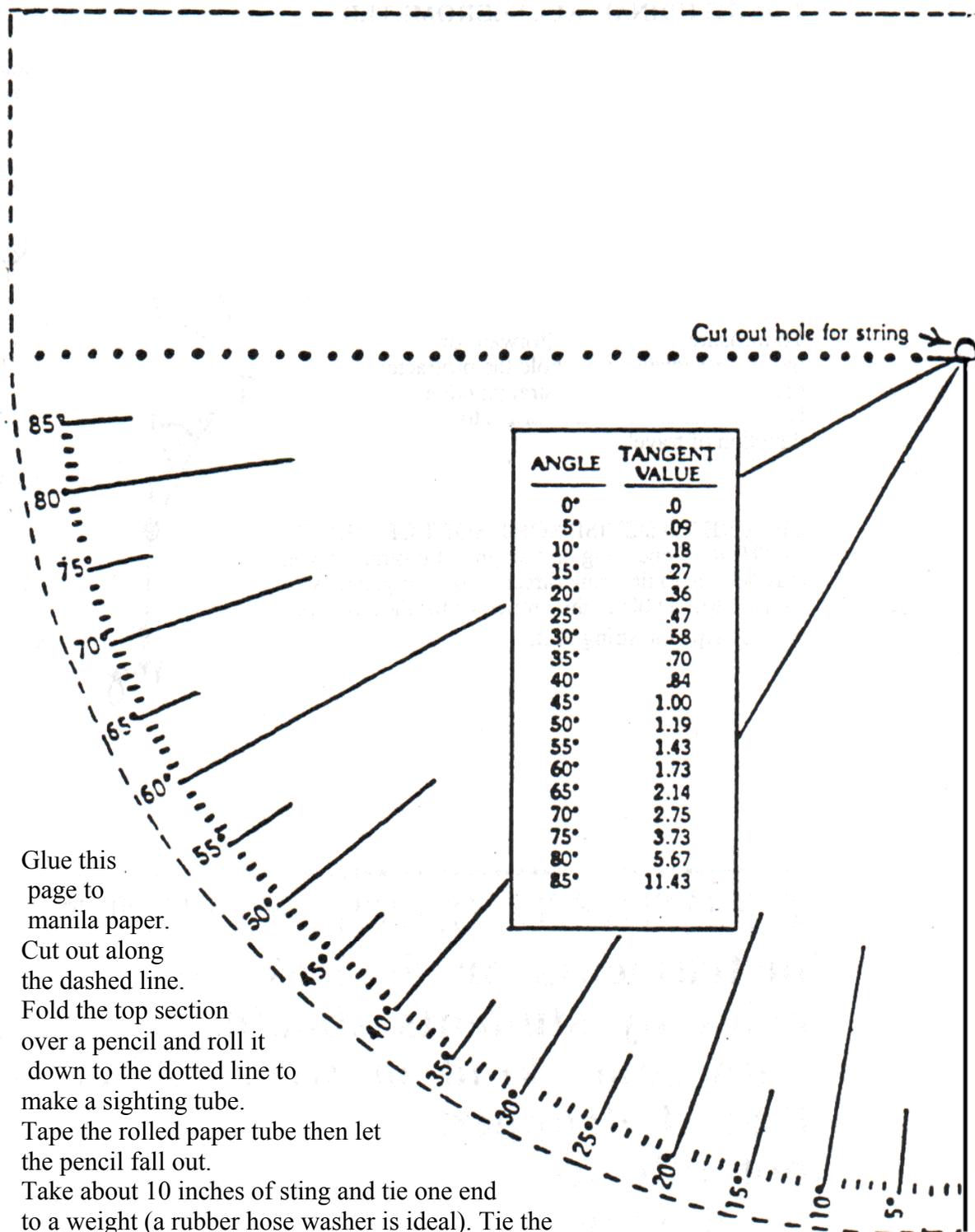


TRIANGULATION INSTRUMENT AND ACCELEROMETER



1. Glue this page to manila paper.
2. Cut out along the dashed line.
3. Fold the top section over a pencil and roll it down to the dotted line to make a sighting tube.
4. Tape the rolled paper tube then let the pencil fall out.
5. Take about 10 inches of string and tie one end to a weight (a rubber hose washer is ideal). Tie the other end through the hole at the top of the drawing.
6. Let the string hang free. The angle it marks off is the angular height of an object seen through the tube.
7. This device can be used for measuring heights, and as a horizontal accelerometer. The acceleration value is simply $g \tan \theta$, where g is the acceleration of gravity.