

1046-J1-190      **Andrew J Simoson\*** (ajsimoso@king.edu), 1350 King College Road, King College, Bristol, TN 37620. *Albrecht Dürer's Trochoidal Woodcuts.*

Albrecht Dürer, the great Renaissance German artist, is credited with being the first to introduce the hypocycloid curve along with the more general family of trochoid curves, as presented in his 1525 geometry treatise, *The Art of Measurement with Compass and Straightedge*. He argued at length that “geometry is that without which no one can either be or become a master artist.” Did he use the trochoid in his woodcuts? We examine two cuts: *The Adoration of the Lamb* and *The Circumcision* and ask whether the lamb rests on a hypocycloidal arch within a circular halo and whether the vines adorning a synagogue wall follow a cardioid. We check it out using a little calculus and superimposing software generated trochoids upon his work. (Received August 15, 2008)