962-T1-349   **Brendan J Foreman*** (`bjf5@po.cwru.edu`), 221 Yost Hall, Department of Mathematics, Case Western Reserve University, 10900 Euclid Avenue, Cleveland, OH 44106-7058. *Watches, laser scanners, and why they have anything to do with angle trisection.*

Take a good well-wound watch (say a Rolex) with a smoothly moving second hand, place it face down on a good scanner, and take its digital image. In the resulting image, the second hand will actually be curved, not straight. This is a very interesting situation where relatively new technology illustrates some very old concepts of calculus in a novel way.

In this talk, I will answer the question in title, which is namely that, given the proper speed of the scanner, the curve of the second hand will be the Quadratrix of Hippias. More importanly from an educator's point of view, I show how this situation can be presented as an interesting assignment for just about any math course from the sixth grade and beyond. (Received September 12, 2000)