1077-51-2102   **John McCleary*** (`mccleary@vassar.edu`), Department of Mathematics, Vassar College, Poughkeepsie, NY 12604. *Toward a history of the square-peg problem.* Preliminary report.

While a young instructor in Göttingen, Otto Toeplitz reported on 'a particular exercise in Analysis situs,' to find four points on a continuous closed curve in the plane that form a square. Toeplitz claimed a proof for convex curves but never published such a proof. This problem, known as the square-peg problem, has been considered from many different viewpoints during the last century. In this talk we will consider approaches to the problem, how it was transmitted, significant breakthroughs, and the parallel developments in topology. The talk is a kind of biography of a problem. (Received September 21, 2011)