In 1901, Alexander Hamilton Church wrote a path-breaking article in *The Engineering Magazine*, entitled ‘The proper distribution of establishment charges’. This article, published in six parts, is generally considered to have been one of the most important articles on the subject of overhead allocation and Church’s system of scientific machine rates is often seen as a precursor of work which eventually resulted in the emergence of standard costing. Around the same time, Church introduced his system at Renold, a firm of British chain manufacturers, where it was used well into the First World War. Towards the end of the war, however, the system was gradually abandoned in favor of standard costing and budgetary control. Using archival and published sources, this paper examines the factors leading to the demise of Church’s system at Renold and, in so doing, throws light on the between scientific management, organizational change and the development of successful costing systems.