Plaster casts were an important tool of the fields of Classics and Art History in the nineteenth century, used to show the American public examples of exquisite art when originals were not available. Plaster casts are often studied within the context of museums and university collections, but their role at the world fair has not yet been addressed. This thesis investigates the history of acquisition and display of plaster cast collections present at the 1904 Louisiana Purchase Exposition in St. Louis, Missouri. These include the collection at the University of Missouri-Columbia that was compiled by John Pickard, that of the German artist Auguste Gerber that was then acquired by Southeast Missouri State University, and lastly that of the National Museum of Natural History of the Smithsonian Institution. I will examine how each of these cast collections functioned at the world fair and how they related to its research and educational paradigms as well as how notions of authenticity were dictated in these collections at both the world fair and their following display spaces. Authenticity, as regards these collections of plaster casts, was determined largely by context, but also by craftsmanship, dimensionality, color, and the ways in which plaster casts were written about. I posit that art historians and classicists should look to other plaster cast collections at world fairs and that such collections need to be analyzed with regard to their creation for international expositions as sites of contact for an interested and educatable public.