Model from Centennial Exposition



This model was part of a display in the Government Building at the 1876 International Exhibition in Philadelphia, Pennsylvania. The topographical model illustrated the middle section of Rock Island Arsenal from Sylvan Slough to the Mississippi River. The original model was cased in glass and exhibited during the 1876 International Exhibition from mid-May to mid-November.

In the 1876 Report of the Chief of Ordnance, Lieutenant Henry Metcalfe provides great detail on the model of Rock Island Arsenal. The model's buildings were created by Frederick W. von Egloffstein of New York using a process called photo-sculpture which was quite innovative at the time.

The buildings on exhibit were made on a scale of 1/300. The process used photographs to create a three-dimensional object. Photographs of the actual buildings were exposed to a thick film of sensitized gelatin transferring the image onto the gelatin. Once the image was transferred, portions of the gelatin were washed away leaving only the image. The gelatin was then swelled with cold water until a low relief was created. Plaster was poured over the gelatin relief creating a permanent mold. Each side of the building was then cast from the mold, creating a perfect replica of the existing building.

This model is listed in the 1909 museum inventory and pictured in an early photograph of the exhibit hall.



Detail from a photograph in the museum's 1909 catalog shows the model on display in museum.