



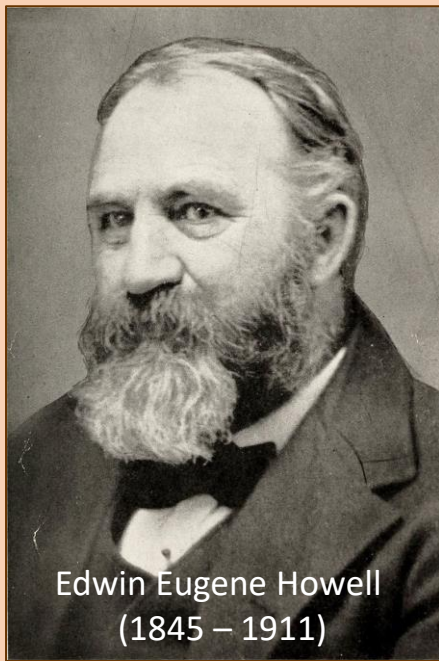
48 x 48 inches



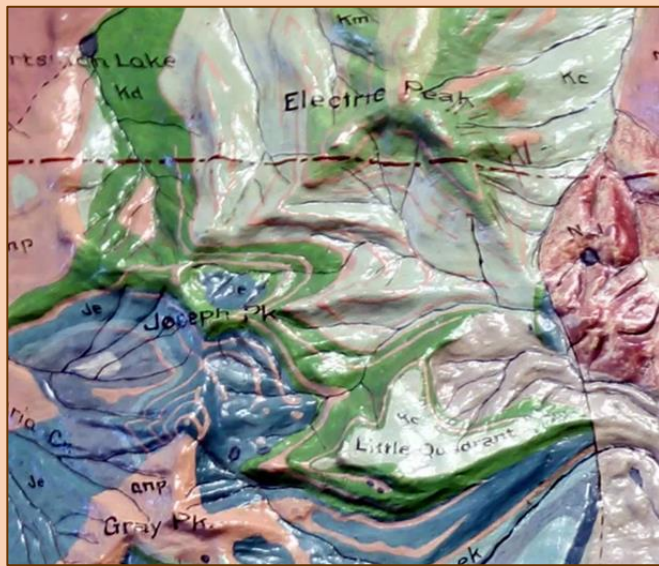
36 x 48 inches

These raised-relief maps are on display in Buckham Hall. They are plaster casts of the first master model and are dated to 1913.

See following page for more information



Edwin Eugene Howell
(1845 – 1911)



At 7 ft. square, shown here is a section of a historic 1897 geologic relief model of Yellowstone National Park and the Absaroka Range by Edwin E. Howell. Photo: Melanie McCalmont

The raised-relief maps shown here were originally on display at the Buffalo Museum of Science and were subsequently donated to the Geography and Planning Department in the 1990s.

The maps were modeled by **Edwin Eugene Howell**, an American geologist and cartographer, who produced some of the most detailed raised-relief maps of his time, for which he has been described by some as *"a pioneer—if not the pioneer—in the United States."* These maps are plaster casts of the first master model and are dated to 1913.

To make the master model Howell would take contour maps of the region of interest and blow them up to the size that he wanted. He would then use plaster to form the 3-D map along the contours, using pins to mark relative heights. The master model was then smoothed over in clay. A negative (cast) would be made from the master model, and the cast would then be used to make copies, which were each painted and then distributed¹.

Howell studied at the University of Rochester and was a founder of the Geological Society of America. For much of his professional life he was a geologist of the United States Geological Survey and involved in many mapping adventures in the U.S. West. In his later years he devoted his time to the manufacture of geological models and maps. Raised-relief maps – like these – helped the public visualize regions of our planet long before aerial and satellite imagery were available. They were an interpretive tool popular in schools and museums. Bulky and cumbersome, few survived.

¹As described Melanie McCalmont a geographer specializing in relief maps.