

## Donation of the Month

Silica mining bucket  
Donor: Terry Woodside  
2010.56.1



The geology of Northwest Arkansas, with its layers of sedimentary rock and its numerous caves, gave birth to the hope that mineral wealth was to be found here. Throughout the years, prospectors and investors have tapped into the richness of the Ozark hills, extracting gold, copper, limestone, coal, and a variety of other minerals. Success, though, can be hard to come by. While some ventures were merely dreams, others proved more prosperous. In the end, lime and silica showed the true wealth of the land.

Rogers is home to the most extensive and thickest deposits of Tripoli (a microcrystalline form of quartz) in Arkansas and our silica industry produced large quantities of this mineral. Due to its inert nature and its fine-grained texture, tripoli has numerous applications, mainly as an abrasive in polishing, buffing, and burnishing compounds; in scouring soaps and powders; a filler or extender in plastics, rubber, and sealants like caulks and epoxy resins; and a pigment in paints. It also improves the coating and flow of paints. As an additive in Portland cement, it enhances the product's strength and washability. Dolomite is also a common mineral in Benton County and was heavily mined in the 1920s and 1930s. It is frequently used in soil fertilizer.

Tripoli has been mined by both underground (Ozark region) and open-pit (Ouachita region) methods. The mined material is dried, crushed, pulverized, disaggregated, and sized by screening or air-flotation. The range of particle size of individual quartz grains composing tripoli is from 0.5 to 10 microns. The color of the tripoli varies within the same deposit. Colors include white, cream, tan, and brown, with white being the least prevalent but most marketable.