REFINER'S FIRE AND FULLERS' SOAD

In comparing Himself to these two things, the Lord teaches us a lot about how He purifies us. "But who may abide the day of his coming? and who shall stand when he appeareth? for he is like a refiner's fire, and like fullers' soap." Malachi 3:2



A Refiner of Silver

 Silver was extracted from ores containing lead (such as lead sulfide, or galena).
The ore was heated in a fire and the lead sifted out of the ashes.

3. The lead was placed in a dish known as a cupel,

Galena

which was made of bone ash or clay containing calcium carbonate, and heated in a furnace to 1,600–1,800°F (900–1,000°C).

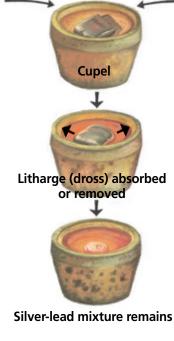
- 4. When the metal reached the right temperature, the refiner introduced oxygen by blowing air over it through a bellows.
- 5. Litharge, or silver dross, would form on the surface of the molten metal, and the

refiner would blow or scrape it off, leaving pure silver. Litharge was also absorbed into the cupel as the lead reacted with the calcium carbonate.

6. A refiner would usually apply this process twice, reintroducing lead to the silver so that newly formed litharge could remove any remaining impurities.

The process was delicate, requiring just the right temperature and just the right amount of lead. The refiner would often know he had achieved pure silver by seeing its unmistakably pure glowing light.

Oxygen introduced to ore



The cupellation process



PREPARE TO MEET GOD

"There are many kinds of challenges. Some give us necessary experiences. Adverse results in this mortal life are not evidence of lack of faith or of an imperfection in our Father in Heaven's overall plan. The refiner's fire is real, and qualities of character and righteousness that are forged in the furnace of affliction perfect and purify us and prepare us to meet God."

Elder Quentin L. Cook of the Quorum of the Twelve Apostles, "The Songs They Could Not Sing," *Ensign*, Nov. 2011, 106.

A Fuller of Cloth

A fuller's job was to cleanse and whiten cloth. In Jerusalem, the cleansing process took place in a fullers' field outside the city because of the smell. Dirt and oils were removed from the wool so that it would be pure white and ready to be dyed, if desired.

Soap contained alkaline substances such as sodium carbonate or potassium carbonate (the word *alkali* comes from *kali*, the Arabic word for the saltwort or glasswort plant, whose ashes were used for soap). These chemicals remove oil (and the dirt that clings to it) by combining with the oil molecules to make them



Saltwort

water soluble. For many centuries, the process for making soap was a closely guarded secret among select Jewish families.

With the cloth soaking in soap and water, the fullers beat or stamped it to remove the impurities (the Hebrew word for *fuller* comes from a root meaning "to tread").

What We Can Learn

The Lord purifies us. Like clean, white cloth or brightly shining silver, the end product of our purification is something beautiful and valuable—a soul perfected in virtue and holiness. We can attain this state only with the Lord's help and in His way.

The purification process can be harsh and difficult. The trials of this life are not only unavoidable but also necessary. We must be "willing to submit to all things which the Lord seeth fit to inflict upon [us]" (Mosiah 3:19) so that we can become like Him.

The Lord is with us through our trials. The refiner of silver and the fuller of cloth could not set their processes in motion, walk away, and return later when it was finished. They had to be there at every stage and see it through to the end. Likewise, the Lord is not distant from us in our trials but is intimately engaged in our lives. ■