

**Falling
Down
on
the
Stairs.**



The Guzman steps.

Author,s Photo.

By chance, I came across an account by ‘El Corresponsal’, writing, on the 4th October 1890, to La Crónica Medidional from Vera, about the ore processing facilities at the Guzman mine. While researching the early jaw crushers and other early mechanized plant he was describing, I found the illustration (below) of an ore washing system that was buried in a Google search. There was no denying the similarities between the flight of stairs at the Guzman and those in the picture.

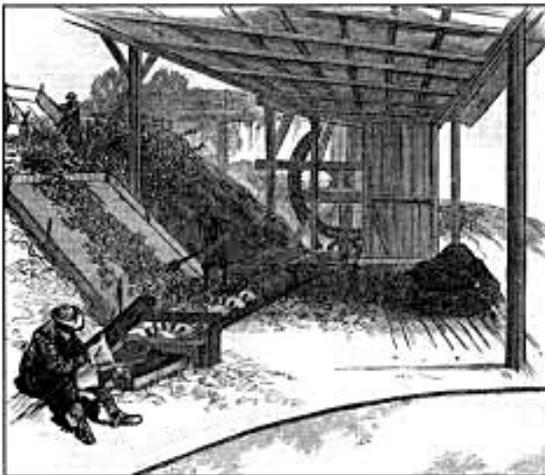
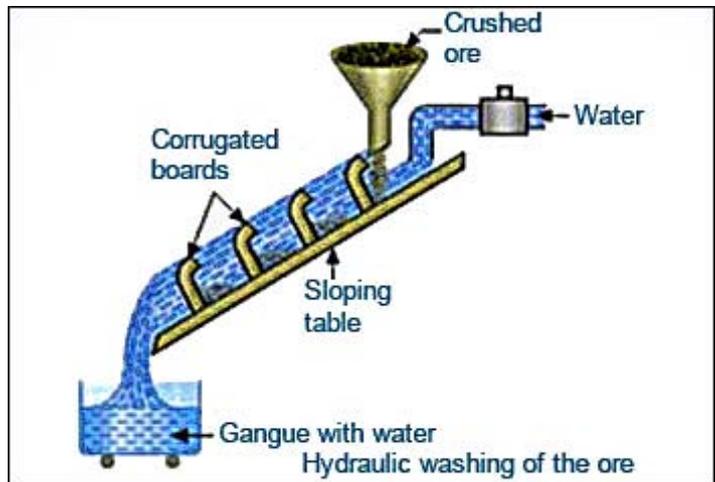


Illustration of a stepped ore washing system.

Jstor



How the system works.

simplyscience

The stairs are a gravity separation system, where the heavier, denser ore particles remain on the treads, while the lighter gangue particles are washed away by a stream of water flowing down the steps. Because of the aljibe situated at the bottom of the flight, I had assumed that it was a system, working on the same principle, but for collecting detritus out of the rainwater before it entered the aljibe. According to Antonio Gonzalez Jódar and Francisco Mulero, this aljibe was used to collect water from the ore washing process so that it could be recycled and passed over the steps again.



The aljibe at the bottom of the steps. Author's Photo.

I may be wrong again, but I imagine that the aljibe wasn't built for this purpose, but rather was repurposed for it. El Corresponsal makes no mention of this type of gravity washer in his account, so I'm of the opinion it was brought on line at a later date, possibly the 1920's. By this time the Guzman was using electricity to power the machinery, so would have had ample supplies of water in the massive balsa at the mine. The captation and filtration system associated with this cistern was as good as that used for an aljibe, meaning that the water would have been suitable for human consumption, so may have rendered the aljibe redundant.

The above illustration, and the actual Guzman steps, were the only examples of this type of system that I had ever seen or even heard of, but, I was in for a shock. For 15 years I have holidayed at el Arteal and had never realized that what I'd always thought of as the traces of an inclined plane were, in fact, the remains of a similar flight of steps. These possibly date to the same era as the Guzman steps, somewhere between 1908, when the pumping station was remodeled, and 1936, the Spanish Civil War.



Two views of the el Arteal steps, situated next to the cutting for the aero-cable.

Left, sif-mes-1.

Above, Google screen print.

The Almagrera doesn't reveal its secrets lightly, and it continues to confound me.