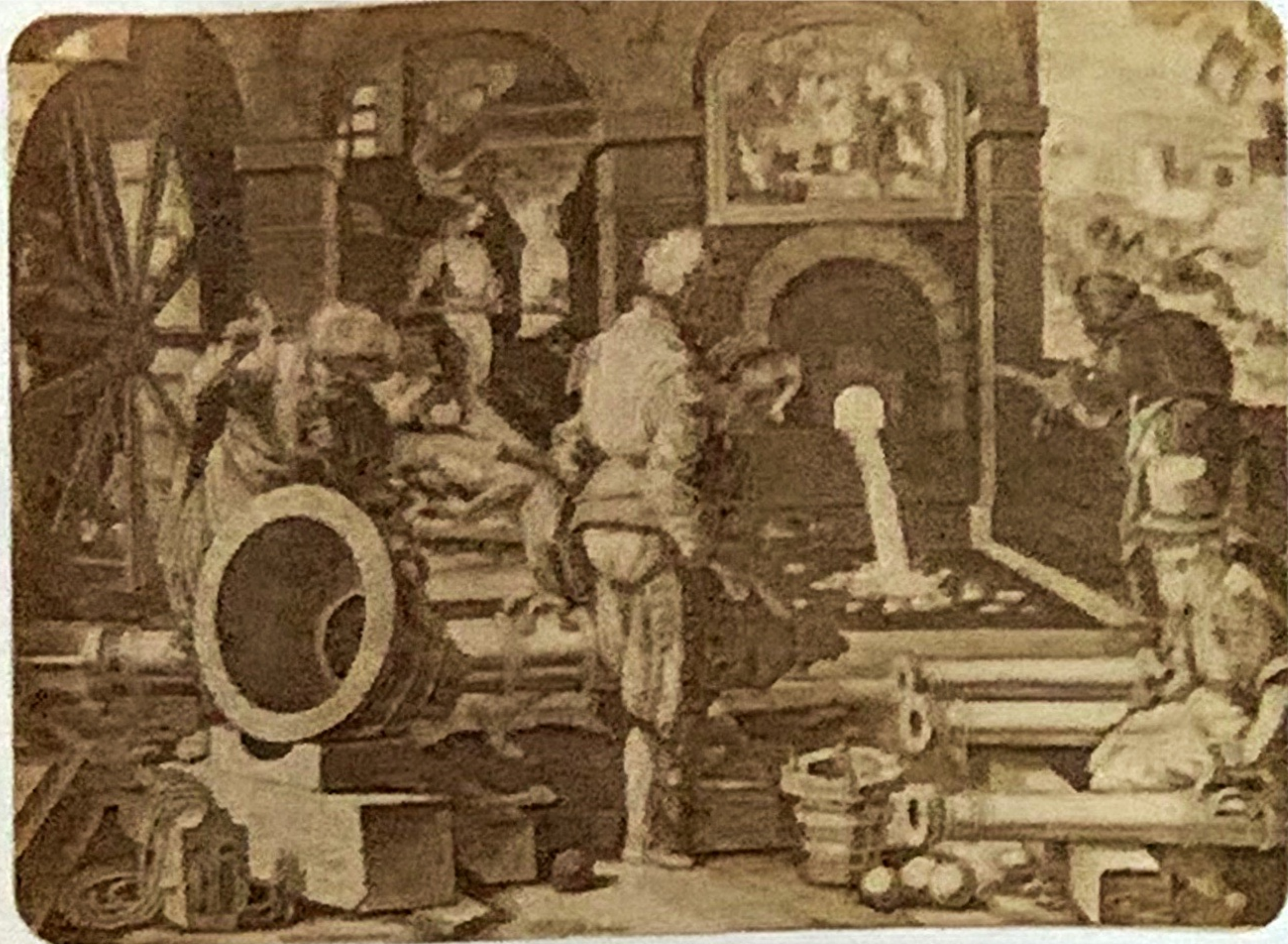


A CONQUISTADOR'S CANNON

have been found at the site, some no doubt from the Spaniards' matchlocks, wheellocks and perhaps from the wall gun itself. The metallurgical analysis of these projectiles is underway. With both the wall gun and the lead shot, we hope to be able to determine whether they were cast in Spain, or perhaps in what is now Mexico, by chemically matching the alloys to known ore-producing regions. Preliminary analysis of the wall gun reveals a lack of lead in the bronze mixture, which is consistent with the signature of having been made in Mexico. If so, then this is the oldest surviving firearm actually made in the New World, firmly dated to 1540, and perhaps made two decades earlier in Mexico by Conquistador Hernán Cortés.

How accurate were such wall guns? Large smoothbore guns without sights firing a lead round ball can generally hit a man-size target at about 50-100 yards. A group of men in a battle formation could be hit much farther, and the solid round ball would be deadly out to the maximum range of the gun. The rate of fire for the gun would be two to three shots per minute with a trained gun crew, until the blackpowder fouling in the barrel forced them to stop and clean it out. Six to 10 shots would be about right, depending on the diameter of the ammunition, type of wads and the amount of powder used. Some cannons were swabbed after each shot, but in a hot, close fight, this was often ignored.

On the trail, the wall gun barrel was transported lashed to a mule or horse, along with the heavy wooden tripod. The hole in the right-angle hook under the barrel was a tie-down point and was also used to hold match cord. At least one other animal would probably have been needed to transport the lead balls, buckshot, powder, ramrods and cleaning accessories. There were no wheeled carts, wagons or caissons on this expedition, so everything was carried by either animals or humans. This is ultimately why they carried very light artillery pieces.



Now that the Coronado expedition has been anchored to a known point on the ground, other Coronado sites are being discovered along the trail to the northeast. The expedition consisted of about 400 Spanish soldiers, several hundred servants and camp followers, as well as about 1,500 native allies from what is now Mexico. They were driving thousands of head of livestock along this route, such as cattle, sheep, pigs and extra horses, so their progress must have been fairly slow. Modern-day cowboys and livestock wranglers were asked to help estimate how far this herd of animals could travel in a day. This and other analyses caused Dr. Seymour to look for sites at that distance that had sufficient water and fodder. As a result, four new campsites have recently been discovered. Work will continue at this archaeological site for years to come, and a professional documentary film crew has been involved in capturing the discovery. 🏹

This archaeological effort is privately funded with no grants, charters or support from universities. To support the excavation and the search, or the film (specify which), tax-deductible donations are accepted at:

Arizona Coronado Project (You must specify this project.)
Old Pueblo Archaeology Center
P.O. Box 40577
Tucson, AZ 85717-0577
(520) 798-1201



A circa-1590 engraving by Philip Galle (top) illustrates how the hackbut cannon was likely made, possibly in Mexico in the 1520s, with molten metal being poured into a sand mold. Hundreds of other artifacts have been unearthed, including crossbow bolt heads and gable-headed nails (L.), as well as medieval horseshoes similar to the one pictured (far L.).