with the movements of the legs, the legs are raised without bending the knee at an angle from the body, the toes turned out in descending, the heel striking the lamo first, and as the heel touches it the other leg is raised, in this way he proceeds all over his little lamero until it is finished. But notwithstanding all that has been said, there is a loss of the metal contained in the ore as well as the mercury, which is an expensive item; there is no doubt that during last century, especially towards the end, it (the Patio Process) was at its zenith in Mexico as a metallurgical process, which is borne testimony to by a report about that time by one Jose Acosta, who said that in Potosi alone seven thousand (7,000) quintals of mercury were used annually in dressing the ore, not to mention the mercury recovered from the first washing; but it has gradually lost ground since until it has been replaced at innumerable mines by other processes. In Mexico the cauldron or cazo process is one that has been used with much success. Without giving a description of it, it might be said that the apparatus instead of being as now a vessel formed either of blocks of stone or wooden staves like those of a tub, the bottom being a slab of copper 2½ inches in thickness, the metallic bottom retained the same as the head or bottom of a barrel being retained by a groove running round the interior of the vessel, the original cauldron, as invented by Alonzo Barba, was essentially "to be of copper pure, as any alloy present in the copper would involve the mercury taking it into solution; they must be in shape inverted cones and flat bottomed, the under part to have a rim of 6 or 8 inches high and half an inch broad, all beat of one piece; other plates of copper are fixed in the inside by copper nails, it must be water tight, the inside of the boiler to be lined with lime and ox-blood, the upper part surrounded by iron rings, to which is fixed a crossboard carrying at its centre a spindle with wings, which revolves, agitating the contents of the cauldron."

The cazo process or hot amalgamation was accidentally discovered by Alonzo Barba. When trying to fix mercury by boiling silver ore, mercury, and water, mixed in a copper dish, he found that he had a shorter method of amalgamation; he gradually improved on this and introduced it into practice in Peru, in which it was successful in its application to the treatment of chlorides, bromides and iodides of silver which are abundant in that country, and also the ores containing silver in the free state. It was introduced in the sixteenth century and has been in use ever since. There is no change in the process since it was invented, with the exception of the above mentioned replacement of the cauldron entirely made of copper for the one with merely a copper bottom; indeed it was averred by Barba that nothing but a cazo of solid copper would do, but the great corrosion of the copper and the consequent expense