**The Early Days of Toxicology: Poisonous Powder**

Top of Form

Bottom of Form

By ELIZABETH SVOBODA

Published: May 11, 2009

Life seemed to be coasting along smoothly for Mary Blandy. The daughter of Francis Blandy, a well-known lawyer in Oxfordshire, England, Mary was all grown up by the mid-1740s and preparing to marry the love of her life, Capt. William Henry Cranstoun, who was descended from Scottish nobility. But the relationship hit a snag when Mary’s father discovered that Cranstoun had concealed his marriage to a Scottish woman named Anne Murray. Intent on securing the £10,000 dowry that Francis Blandy had advertised to any man who married Mary, Cranstoun decided to take matters into his own hands — or, more accurately, to entrust them to his lover.



Mary Blandy poisoned her father.

“He sent Mary arsenic powder, which he said was a ‘love philter’ that would make her father more likely to like him as a suitor,” said Allan Jamieson, director of the Forensic Institute, based in Scotland. “She mixed this with her father’s food.” (It is unclear whether Mary realized at first that the substance was poison, but she later tried to hide evidence of her tampering.)

It wasn’t long before the “love philter” began to have the anticipated effect. The powder Mary stirred into her father’s tea and gruel every day made him so ill that he would stay up all night with [vomiting](http://health.nytimes.com/health/guides/symptoms/nausea-and-vomiting/overview.html?inline=nyt-classifier) and [stomach pain](http://health.nytimes.com/health/guides/symptoms/abdominal-pain/overview.html?inline=nyt-classifier). In August 1751, he died. Anthony Addington, the doctor who had treated Francis Blandy, suspected arsenic was the substance that had felled him and conducted a series of physical tests to prove his point. When he put a sample of the powder Mary had given her father into cold water, for instance, part of it remained on the water’s surface, but most of it stayed on the bottom undissolved — the same thing that happened with a known sample of arsenic. Additionally, when Addington tossed the powder onto a red-hot piece of iron, it did not burn, but sublimated, rising up in garlic-smelling white clouds just as arsenic did.

Addington argued at trial that these results proved Mary’s powder was, in fact, arsenic. “Nowadays, we would call this type of testing presumptive,” Dr. Jamieson said. “That is, the substance could be the material in question, but the tests are not definitive.” Nevertheless, the court agreed with Addington’s explanation — the first time any court had accepted toxicological evidence in an arsenic-poisoning case — and Mary was sentenced to death for her father’s murder and hanged on April 6, 1752. Cranstoun escaped before he could stand trial, but he died later that year.