

Notes from the Oesper Collections

Herbert Hoover and the History of Chemistry

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When conducting tours of the Oesper Collections in the History of Chemistry I always call attention to a small framed note which hangs on the wall of the rare-book room just below the portrait of Ralph Oesper. It is printed on White House stationary (figure 1) and its handwritten message is quite brief:

*To the Browsers in the Chemistry Library of the
University of Cincinnati. Cordial greetings!*

*Herbert Hoover
Lou Henry Hoover*

Why, I ask visitors, do they think Ralph Oesper wrote to President Herbert Hoover (figure 2) and his wife, Lou Henry (figure 3), requesting this memento for the chemistry library at Cincinnati? Was he an autograph hound or was he merely a rabid Republican? The an-



Figure 2. Herbert Hoover at age 40, two years after publishing his translation of Agricola.

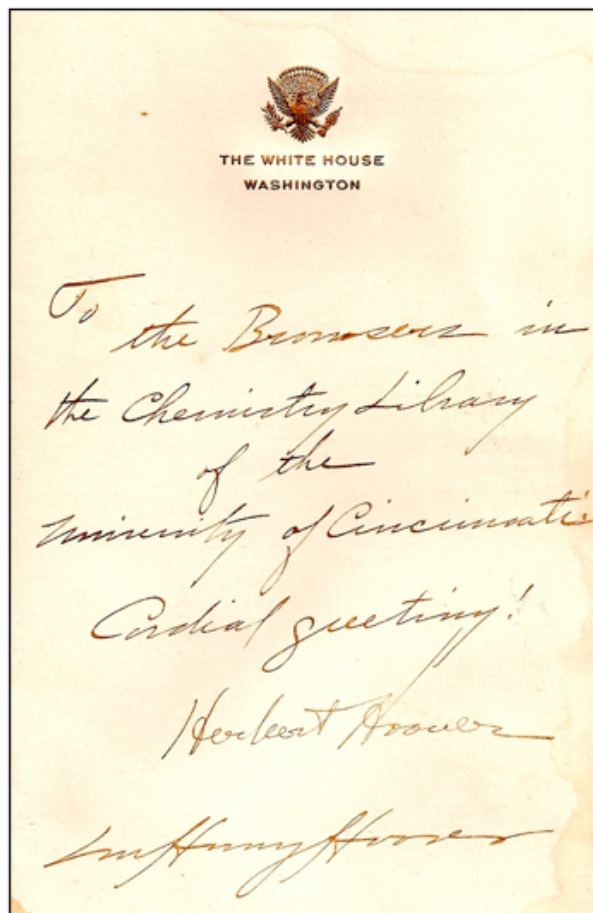


Figure 1. The signed note from Herbert and Lou Henry Hoover to the "Browsers" in the Chemistry Library.

swer, of course, is that Oesper's request had nothing to do with either of these motives but was rather based on his belief that both Hoover and his wife had made a significant contribution to the history of chemistry.

Herbert Hoover was born in Iowa in 1874 and educated at Stanford University, where he majored in geology, and where he met his future wife, Lou Henry, who was also a student of geology. After graduation in 1895, he found work as a mining engineer and consultant – employment which took him to many exotic loca-

tions around the world, including Africa, Australia, and China. By 1901 he had become independently wealthy and had settled in London, where he operated his own consulting firm. It was also during this London period that he published his first two books – *Principles of Mining* (1909) – based on lectures he had given at both Stanford and at the Columbia School of Mines, and his well known translation, done in collaboration with Lou Henry, of the 16th-century classic on mining and geology – *De re metallica* (1912) – by the German physician, Georg Bauer (figures 4-5), better known by the Latinized name of Georgius Agricola.

It is not known how the Hoovers became aware of Agricola's book nor why they decided to translate it into English. The translation is dedicated to Professor John C. Branner of Stanford University, who had



Figure 3. Lou Henry Hoover with her sons, Allan (left) and Herbert Jr. (right), circa 1908.

taught geology to both Herbert and Lou, and it may well be that Branner had mentioned Agricola in his lectures or that he had even taught a course on the history of geology. In any event, the *De re metallica* of Agricola (who, it should be noted, had also written several other important books on geology and mineralogy) was well known to historians of geology, as well as to historians of chemistry. Though not intended for either chemists or alchemists, Agricola's book has nevertheless long been prized by historians of chemistry for its clear descriptions of 16th-century assaying and separation techniques, as well as for its wonderful woodcuts of period laboratory apparatus (1).



Figure 4. Georgius Agricola (1494-1555), born Georg Bauer.

Owen Hannaway has pointed out that the surviving evidence strongly suggests that the initial idea of translating Agricola's famous book was due to Lou Hoover rather than to her husband, as in a letter to John Branner, she expresses her surprise that the British Museum was unable to locate an English translation of the book and hints that she might attempt to undertake a translation herself (2). In the end, the actual

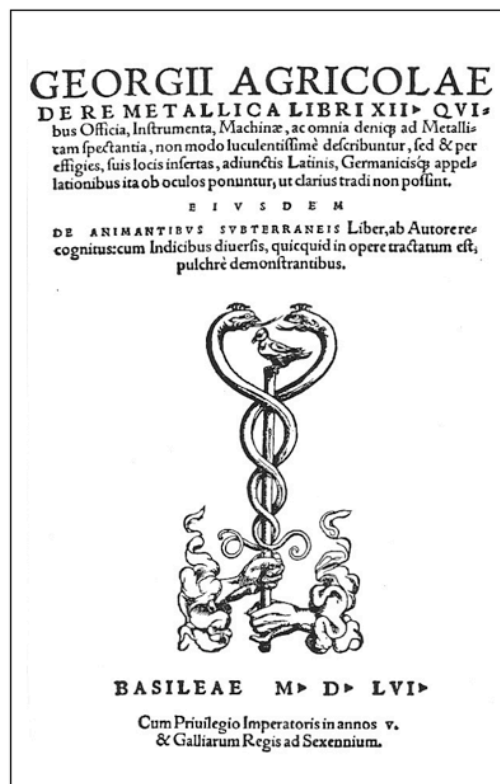


Figure 5. Title page of the first edition of *De re metallica*.

work of translation from the original 1556 Latin edition was done by at least three different translators hired by the Hoovers as neither of them could read Latin. Likewise, they also hired researchers to collect the background materials which they used to write both their introduction, their footnotes, and the various appendices to the book, since much of the necessary information also required translation from period Latin or German sources. None of this is particularly unusual by today's standards, as many professional historians make use of paid translators and library researchers to facilitate their work.

The Hoovers spared no expense in printing the final book (figure 6), which was published in 1912 in London under the auspices of *The Mining Magazine*. The translation was handprinted in Scotland on high quality paper as a large folio volume bound in vellum which was explicitly designed to replicate, as closely as possible, the original Latin version printed by Froben in 1556.

Rather surprisingly, we know something about the circumstances surrounding the acquisition of the copy of the Hoover translation owned by the University of Cincinnati. Two events seem to have played a role, both of which occurred in 1929, the year in which our copy was acquired. The first was, of course, the election of Hoover as the 31st President of the United States – an event which generated a good deal of publicity concerning his earlier life and career. The second was the publication of an article in the recently founded *Journal of Chemical Education* by a graduate student in chemistry at Cincinnati named Robert D. Billinger entitled “Assaying with Agricola.” This was done under the guidance of Oesper and was based on copies of both the original 1556 Latin edition and the 1912 Hoover translation that Billinger had borrowed, via interlibrary loan, from Lehigh University, from which he had received his undergraduate degree, and where he would spend the remainder of his career as Professor of Chemistry after receiving his doctoral degree from Cincinnati later that year (3). No doubt these twin events served to bring the importance of Agricola's book and the Hoover translation to Oesper's attention and prompted him to both request that the library at Cincinnati purchase its own copy of the translation and to request a small memento from Hoover and his wife to mark the occasion.

Oesper also left us with one final clue concerning his motives in the form of a short, typewritten note pasted inside the cover and transcribed from the 27

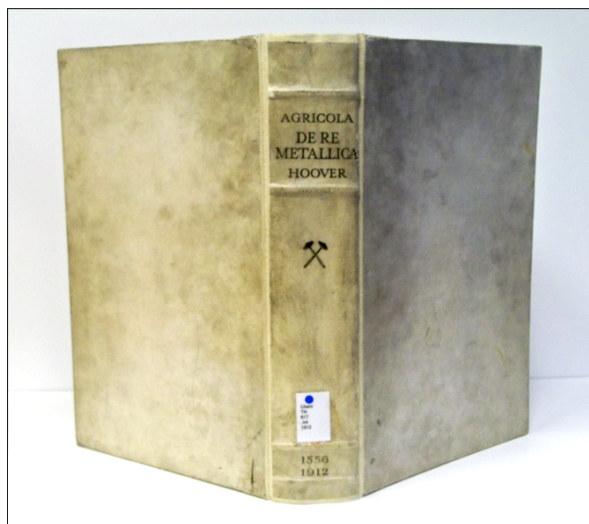


Figure 6. The copy of the Hoover translation of *De re metallica* belonging to the Oesper Collections. Note the crossed geological hammers on the spine and the dual publication dates of 1556 and 1912.

April 1929 issue of *Publisher's Weekly*:

A copy of the first edition of Georgius Agricola's "De re metallica," translated by Mr. and Mrs. Hoover from the first Latin edition of 1556, brought \$170 last week at the American Art Galleries, Harry F. Marks being the purchaser. This volume was published in London in 1912 and since the nomination of Mr. Hoover for the presidency has been very much in demand. A year ago it sold for \$25, but the price, in London and New York, began to advance as soon as Mr. Hoover secured the nomination and since his inauguration has gone still higher. Its current price is higher than that of the first edition of the original Latin work from which it was translated.

References and Notes

1. Not only is Agricola discussed in most 19th- and early 20th-century histories of geology, he is extensively quoted in Hermann Kopp's epic four-volume *Geschichte der Chemie*, published between 1843-1847.
2. O. Hannaway, "Herbert Hoover and Georgius Agricola: The Distorting Mirrors of History," *Bull. Hist. Chem.*, **1992**, *12*, 3-10.
3. R. D. Billinger, "Assaying with Agricola," *J. Chem. Educ.*, **1929**, *6*, 349-354.