

A LETTER FROM FRANKLIN BACHE TO ROBERT HARE

William D. Williams, Harding University

It is always intriguing to relate a historical artifact to the people and events of its original use. The following letter from the author's collection has prompted some interesting investigation into the collaboration of two prominent early Philadelphia chemistry teachers (1):

Dear Doctor: Philada. Jan. 8. 1835

Allow me to thank you for the check you were good enough to send me this morning for one hundred & twenty-seven Dollars; 27 Dlls for medical services and 100 Dollars for my services in relation to the new Ed. of your compendium.

Very respectfully & truly yours:

Franklin Bache
To Dr. Hare

Robert Hare's *Compendium of the Course of Chemical Instruction* . . . was the most original American chemistry text published during the first half of the 19th century. Hare (1781-1858) taught chemistry at the University of Pennsylvania Medical School from 1818 to 1847 and spent much of that career developing his textbook. It was not designed for general use, but rather as a transcript of his own unique lectures and ingenious experiments. It was preceded by three shorter precursor works: *Minutes of the Course of Chemical Instruction* . . . (1822-25), *Supplement to Minutes* . . . (1824), and *Engravings and Descriptions* . . . (1826). These were combined and enlarged into his *Compendium*, which went through four successively larger editions from 1827 to 1843 (2).

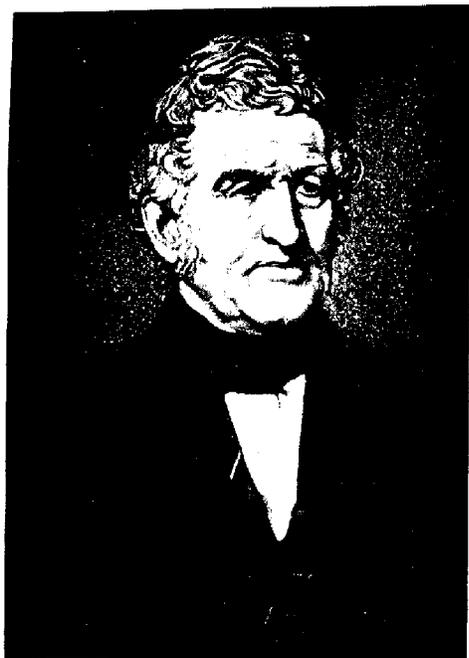
Franklin Bache (1792-1864), great-grandson of Benjamin Franklin, also had a distinguished career. A physician in his early years, he gradually turned to chem-

istry as his main interest. He taught chemistry at the Franklin Institute (1826-32), the Philadelphia College of Pharmacy (1831-41), and Jefferson Medical College (1841-64). He wrote *A System of Chemistry* (1819), edited the *Supplement to Henry's Elements* (1823), edited four American editions of Edward Turner's *Elements of Chemistry* (1828-41), and coauthored, with George B. Wood, the *Dispensatory of the United States* (1833), a pharmaceutical reference that has gone through revisions up to the present (3).

There is evidence that Hare was continually rushed with his textbooks. They were often published in parts as the school term progressed and frequently contained apologies for certain parts not being ready. More than once, he called upon Bache for assistance when he did not have time to finish assignments. As early as 1821, when Hare was editing an American edition of Andrew Ure's *Dictionary of Chemistry*, Bache was called to finish the publication. The preface explained that Hare was pressed for time and "pursuant to my advice, the publisher engaged Dr. Franklin Bache to revise the work and read the proofs" (4).

In 1822, Bache edited, "with the approbation of Dr. Hare", a new American edition of William Henry's *Elements of Experimental Chemistry*, which Hare had edited in the previous edition (5). Apparently Hare was too busy with his own *Minutes* and experimentation with his new "Galvanic Deflagrator" to undertake another edition.

Bache served as a reader for the first edition of Hare's *Compendium* in 1827 (6) and was editor of the 1836, third edition "in the absence of the author." Hare explained in the preface that "The health of a portion of my family having rendered it expedient for me to sail



Robert Hare



Franklin Bache

to Europe, I was under the necessity of engaging my friend Dr. Bache to superintend the printing of this edition" (7).

The exact dates of Hare's trip or which member of his family was ill is not known. His presence in England in August 1836 is mentioned in one of his published letters.(8)

Internal evidence in the 1836 *Compendium* suggests that Hare made the revisions before he left. Additions by Bache were enclosed in brackets and occurred in only eight places, totaling about three pages (9). Apparently Bache's main job was overseeing the printer.

The date on Bache's above letter, however, presents a puzzle; January 1835 appears too early for payment for editing the 1836 edition. Perhaps Hare prepaid Bache for work yet to be performed. Perhaps Bache, as we all have done, automatically put the previous year (1835) on his letter written early in the new year (1836). Or, perhaps work on the 1836 edition was already well under way prior to January 1835.

What payment would be reasonable for Bache's editing work? Typical printings of the period were one-thousand copies. Hare's classes were 300 to 400 stu-

dents per year (10). Even though leather bound, such a book would have sold at that time for less than five dollars. If Hare's royalty were 50 cents per copy, he would have collected \$500 on the edition; \$100 might have been a plausible payment to Bache.

Although Bache's letter leaves us with unanswered questions, it is fascinating to know a little more of the human side of these chemists of yesteryear.

REFERENCES AND NOTES

1. ALS, Miles-Williams Collection, Archives of Harding University Library, Searcy, AR.
2. For biographies of Hare, see: E. F. Smith, *The Life of Robert Hare, an American Chemist*, Lippincott, Philadelphia, 1917; W. Miles in E. Farber, *Great Chemists*, Interscience, New York, 1961, pp. 420-433; W. Miles, *American Chemists and Chemical Engineers*, American Chemical Society, Washington, 1976, p. 195.
3. For biographies of Bache, see: E. F. Smith, "Franklin Bache, Chemist, 1792-1864," *J. Chem. Educ.*, 1943, 20, 367-368; G. B. Wood, *Biographical Memoir of Franklin Bache, M.D.*, Lippincott, Philadelphia, 1865; W. Miles, *American Chemists and Chemical Engineers*, American Chemical Society, Washington, 1976, p.15.

4. A. Ure, *A Dictionary of Chemistry . . .*, 2 Vols., Desilver, Philadelphia, 1821, Vol. 1, p. [xiv].
5. W. Henry, *The Elements of Experimental Chemistry*, 2 Vols., Desilver, Philadelphia, 1822, Vol. 1, p. [vi].
6. R. Hare, *A Compendium of the Course of Chemical Instruction in the Medical Department of the University of Pennsylvania*, Auner, Philadelphia, 1827, p. [vi].
7. R. Hare, *A Compendium of the Course of Chemical Instruction in the Medical Department of the University of Pennsylvania*, Auner, Philadelphia, 1836, p. [vi].
8. Smith, reference 2, p. 297.
9. The first person, "I," was used on pp. 5 and 186 explaining a choice of relocating a certain topic. Bache would not have altered Hare's sequence without a bracket explanation.
10. Smith, reference 2, pp. 321 and 325.

ABOUT THE AUTHOR

William D. Williams is Professor of Chemistry, Emeritus, at Harding University, Box 602, Searcy, AR 72149-0001 and is an authority on early American chemistry texts and their authors.