

COMMENTS ON ARTICLE ENTITLED "WHAT IS SAL ÆRATUS?"

BY WILLIAM J. HUSA.*

In an article (1) entitled "What Is Sal æratus?" the question indicated by the title is dismissed with the statement that "sal æratus" is "just an old name for sodium bicarbonate." This statement, however, is not entirely correct. In the days when wood ashes were an important source of alkali, the name "sal æratus" was used to designate an impure potassium bicarbonate; in later years sodium bicarbonate has been commonly sold under the same name, which was written sometimes as "salæratus" and finally as "saleratus." However, in the 1926 editions of Army's "Principles of Pharmacy" and Dorland's Medical Dictionary "saleratus" is given only as a synonym for potassium bicarbonate, and the application of the term to sodium bicarbonate is not recognized.

The "United States Dispensatory" (2) of 1854 lists "sal æratus" under potassium compounds and states that "in composition it is between a carbonate and bicarbonate." In 1867, Edward Parrish wrote as follows (3), "Salæratus is a useful and tolerably pure sesquicarbonate of potassa, prepared by subjecting pearlash to the fumes of fermenting substances from which it absorbs additional carbonic acid. It occupies a position intermediate between the carbonate and bicarbonate, and is much used in baking to furnish the carbonic acid which raises the bread, rendering it light and porous. Light cakes made with it are generally considered less objectionable by dyspeptics than those made with yeast. Recently most of the salæratus of the shops is an imperfectly carbonated bicarbonate of soda."

In the "National Dispensatory" of 1884, it is stated that a "less pure bicarbonate of potassium in a pulverulent state is met with in commerce under the name of sal æratus, but much sold as such is bicarbonate of sodium." In the 16th edition of the "U. S. Dispensatory" sodium bicarbonate is said to be usually distinguished as the "soda sal æratus," while in the 18th edition reference is made to "potash sal æratus." In the 19th edition the synonym "soda saleratus" is given under sodium bicarbonate.

In teaching and in practical pharmaceutical work it is well to bear in mind that "saleratus" may mean either potassium or sodium bicarbonate.

The author of the article "What Is Sal æratus?" criticizes pharmacists for not having at their finger tips the pharmaceutical knowledge necessary to serve intelligently both their lay and professional patrons. Personally, I would not criticize the young pharmacist in the story for his lack of knowledge of facts, but rather for his lack of resourcefulness in finding information. Why should he walk all over the store asking the question when reference, for example, to the glossary of unusual terms in Cook and LaWall—"Remington's Practice of Pharmacy"—would have instantly given the very satisfactory information as follows: "Sal æratus—potassium bicarbonate, usually applied at present to sodium bicarbonate." Certain fundamental facts must be learned and assimilated by every pharmacist, but the field of pharmacy is so vast that dependence must be placed on standard reference books for unusual details.

REFERENCES.

- (1) JOUR. A. PH. A., 15, 982-3 (1926).
- (2) "United States Dispensatory," 10th edition (1854).
- (3) Edward Parrish, "A Treatise on Pharmacy," p. 368 (1867).

BY CLARENCE M. BROWN.**

I read with great interest in the November number of the JOURNAL the article upon "What Is Sal æratus?" I have been somewhat perplexed by this question myself.

During my undergraduate days, I was taught, both in college and by the druggist for whom I was working, that Sal æratus meant sodium bicarbonate of the commercial variety. I was somewhat surprised a short time ago by having my attention directed by some of my students to the definitions of this term found in various textbooks of pharmacy, etc.

I quote these here:

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"Remington, Practice of Pharmacy," 6th Edition, page 1890: "Sal æratus, Potassium Carbonate."

"Arny, Principles of Pharmacy," 3rd Edition, page 410: "The crude bicarbonate (of potassium) . . . was placed on the market under the name of Saleratus."

"Parrish, Treatise on Pharmacy," Wiegand, 1874: "Saleratus is a useful and tolerably pure sesquicarbonate of Potassium . . . it occupies a position intermediate between the carbonate and bicarbonate and is much used in baking to furnish carbon dioxide . . . recently most of the Saleratus of the shops is an imperfectly carbonated bicarbonate of sodium."

The "United States Dispensatory," 1889, 14th Edition: "The salt in powder form called Saleratus . . . is in composition between a carbonate and bicarbonate."

The "National Dispensatory," 5th Edition: "Bicarbonate of Potassium, etc."

"Dorland: Medical Dictionary," 1906, "Potassium Bicarbonate."

"Gould: Medical Dictionary," 1910, "Potassium Bicarbonate."

I was also given a list of Common Names, published several years ago by Prof. Adolph Ziefle, Dean of School of Pharmacy of Oregon, in which Saleratus is defined as "U. S. P. Sodium Bicarbonate."

Of course, it is well understood that the name "Sal æratus" means literally an ærating salt, hence since any of the above chemicals might be used to carbonate a liquid, all of them might be rightfully called by this synonym.

In order to determine, if possible, which of the above chemicals is wanted when a customer asks for Sal æratus, I asked numerous housewives what they used when a recipe called for Sal æratus. Without exception they all used Baking Soda.

I therefore quite agree that what the customer in the case under discussion wanted was Sodium Bicarbonate U. S. P.

This difference of opinion in the Textbooks of Pharmacy probably will give some information as to why the clerk or manager in question did not exactly know what the customer wanted.

THE LIFE AND CHARACTER OF DR. HENRY MILTON WHELPLEY.*

BY J. H. BEAL.

Henry Milton Whelpley was born at Harmonia, Michigan, May 24, 1861. He died after a brief illness while visiting with friends at Argentine, Kansas, June 26, 1926, a little more than a month following the 65th anniversary of his birth.



Dr. H. M. Whelpley.

His parents, Dr. Jerome Twining Whelpley and Charlotte (Chase) Whelpley were of New England stock, and both from literary and professional families. His mother was a relative of Salmon P. Chase, Secretary of the Treasury under President Lincoln and afterwards Chief Justice of the U. S. Supreme Court. His father, paternal grandfather, two uncles and one brother were practicing physicians.

His grammar school education was obtained at Cobden, Ill., and his later training at Otsego, Michigan, where he graduated from High School in 1880, with special honors in mathematical subjects. His proficiency as a student and his extraordinary capacity for work were evidenced even at this early period. During his senior year he was special instructor in algebra to the sophomore class, President of the High School Lyceum, Editor of

* From an address at the Whelpley Memorial meeting held under the auspices of the St. Louis College of Pharmacy, St. Louis, Nov. 17, 1926.