

following a trend of American speech by which words beginning with the digraph *oe* tend more and more to be given the short vowel sound. The name *Oedipus* is another example. This tendency is reinforced by a corresponding tendency in spelling, to which H. L. Mencken calls attention in his book, "The American Language," namely, the conversion of decayed diphthongs into simple vowels, examples being *ecology*, *ecumenical*, *eon*. The editorial staff of the *Journal of the American Medical Association*, for example, has placed the word *oestrus* on a list of such words to be spelled without the *o*, a decision which is sure to influence the usage of American medical and biological writers. This mode of spelling has already been accepted as a variant in the 1934 revision of Webster's Dictionary, and will undoubtedly influence American pronunciation still further in the direction of the short *e*. In American speech, therefore, the short *e* should be used in pronouncing the word *oestrus* and its derivatives.

GEORGE W. CORNER

THE UNIVERSITY OF ROCHESTER
SCHOOL OF MEDICINE AND DENTISTRY

CARBONATION VS. CARBONATIZATION

IN recent years, there has been an increasing tendency to use the term "carbonatization" for "carbonation." The writer has been unable to find the initial use of "carbonatization," but it appears in Lindgren's "Mineral Deposits" (1913, p. 70), and in later editions.

Since 1913, "carbonatization" has appeared in various geology text-books and in various publications.¹ In most of these references, the term is used as indicating carbonation (*i.e.*, the union of carbon dioxide with some base) that takes place during weathering. It is also used for the same process in connection with the deposition of ores by hot waters. This note is a protest against the use of "carbonatization" for simple "carbonation" for the following reasons:

(1) The formation of a salt by the union of carbon dioxide with bases has long been, and still is, called "carbonation" by chemists. This is also the meaning given by all standard dictionaries, such as the Oxford, Standard, Century and Webster.

(2) The suffix "ization," according to all the above-mentioned dictionaries, is used to form nouns of action from verbs ending in "ize," such verbs having been formed by adding the suffix "ize" to nouns or adjectives; the verb meaning to be or do the thing denoted

by the noun or adjective (Century Dictionary). None of the authors using "carbonatization" have used the verb "carbonatize," which would seem to indicate that such a word had not been found practicable.

(3) The word "carbonatization" is a clumsy, non-euphonious term, whereas "carbonation" is much simpler.

(4) In all the above references, the authors use the term "carbonatization" along with "hydration" and "oxidation," both of which latter terms they use in the same sense as chemists do. To be consistent, those who use "carbonatization" should use "hydratization" and "oxidatization." Pronunciation of any of the three words is a laborious process. Adding letters to words already in good usage and of sound meaning is not a desirable or worthwhile practice.

(5) The use of "carbonation" is preferred by most authors of text-books on geology, as is shown by the following list:

Chamberlin and Salisbury, "Geology," Vol. 1, pp. 43, 429, 1906.

H. F. Cleland, "Geology, Physical and Historical," pp. 35-37, 1916.

Hatch and Rastall, "Text-book of Petrology, The Sedimentary Rocks," pp. 155, 206, 313, 1913.

H. W. Shimer, "An Introduction to Earth History," p. 42, 1925.

J. H. Bradley, "Earth and Its History," p. 53, 1928.

G. W. Tyrrell, "Principles of Petrology," p. 173, 1926.

W. A. Tarr, "Introductory Economic Geology," p. 62, 1930.

Emmons, Thiel, Stauffer and Allison, "Geology," pp. 39-41, 1932.

W. B. Scott, "Introduction to Geology," p. 203, 1932.

Branson and Tarr, "Introduction to Geology," p. 62, 1935.

(6) The three terms, "hydration," "oxidation" and "carbonation," as used in reference to the respective processes taking place during weathering and rock alteration, by any process, have been in use so long and indicate so simply the nature of the reaction involved with each agent that there would seem to be little justification for introducing a hybrid like "carbonatization," which adds nothing to the previous good usage.

(7) The suffix "ization" has been added to various nouns (*e.g.*, pyrite \rightarrow pyritize \rightarrow pyritization), in discussions of sundry types of mineral deposits, to describe processes for which no previous word had been used. Many of these words are euphonious and desirable, but "carbonatization," being neither and being wholly unnecessary in the face of the priority of "carbonation," should, in the writer's opinion, be dropped.

W. A. TARR

UNIVERSITY OF MISSOURI

¹ W. H. Twenhofel, "A Treatise on Sedimentation," p. 15, 1932; H. Ries, "Elementary Economic Geology," p. 213, 1930, and "Economic Geology," p. 491, 1930; R. H. Rastall, "Geology of the Metalliferous Deposits," pp. 138, 142, and 162, 1923; C. R. Longwell, A. M. Bate-man and others, "Foundations of Geology," p. 24, 1931.