

of Natural History, I saw in the Imperial Museum at Tokyo the skeleton of a Ziphioid whale belonging to the genus *Berardius*. Upon inquiry it was learned that the skeleton had been secured from a whaling company which conducted operations on the shores of Tokyo Bay.

As it was then too late in the season to permit of a personal visit to the whaling grounds, my friend Mr. M. Matsuzaki, of the Toyo Hogeï Kabushiki Kaisha (Oriental Whaling Co., Ltd.) offered to secure a specimen for the museum. He was able to do so and in 1911 a very complete skeleton reached New York.

This specimen is referable without doubt to *Berardius bairdii* Stejneger, the type locality of which is Bering Island, Bering Sea.

According to Dr. F. W. True,¹ the collection of the National Museum contains three skulls and three skeletons of this rare species, all of which are from Alaska with the exception of one taken at Centerville, California. I do not know that this whale has been recorded in other localities; thus the skeleton in the Tokyo Museum with the one just received in New York extends to Japan the range of both the genus and species.

So far as I have been able to learn the "Tsuchi-kujira," as the Japanese call *Berardius bairdii*, is taken in summer and only in Tokyo Bay, not appearing at other points upon the coast. The other species of this interesting genus, *B. arnouxii* Duvernoy, has been recorded only in the seas about New Zealand.

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ON CITING THE TYPES OF NEW GENERA

At the Boston Zoological Congress the following recommendation was adopted:

To facilitate reference, it is recommended that when an older species is taken as the type of a new genus, its name should be actually combined with the new generic name, in addition to citing it with the old generic name.¹

¹"An account of the Beaked Whales of the Family Zyphiidæ in the Collection of the U. S. National Museum," Bull. 73, 1910, pp. 60, 61.

¹SCIENCE, October 18, 1907, p. 521.

The point is, that a bibliographer should be able to cite the necessary new binomial for the typical species, from the place where the genus was originally defined. I have never heard any objection to the course suggested, but, presumably through inadvertence, the recommendation is not always followed. A noteworthy instance has just come to hand in Mr. Edmund Heller's interesting paper on new genera of African ungulates.² He does indeed print the combination *Dolichohippus grevyi*, but *Sigmoceros lichtensteini* (Peters), *Beatragus hunteri* (Sclater), *Oreodocas fulvorufulus* (Afzelius), *Ammelaphus imperbis* (Blyth) and *Nyala angasi* (Angas), types of their respective genera, are nowhere given their supposedly correct names.

T. D. A. COCKERELL

IN THE INTERESTS OF BETTER SPEAKING

TO THE EDITOR OF SCIENCE: Would it be at all worth while, now that the innumerable scientific papers of the midwinter are about to be read, to urge their readers to take a few elementary lessons in elocution before they ascend their platforms? It is difficult to compute to what extent esthetic pleasure, as well as facility of comprehension, would be added to if men of science understood better the art of putting their communications before the public. The main work of the professional elocutionist would be to show the prospective reader how to produce full, clear, rotund chest tones, instead of the thin, clouded, head tones which they too often adopt. If the dozen or so of precious hours that this would take is too much to demand, perhaps the following simple rules might be of some assistance; I am sorry that they are so very elementary, but in point of fact they are rules which are violated by fully one half of those who read:

1. Stand erect, with chest expanded and not contracted.

2. Consult a physician and see that the nasal bones do not obstruct the nasal passages.

²Smithsonian Misc. Coll., November 2, 1912, Vol. 60, No. 8.

3. If manuscript is to be read from, hold it in the hand (and hold it high); manuscript which is stationary on a desk causes a rigidity of the body which should be avoided.

4. The length of line of the type-written manuscript must be short—not more than seven inches. This is very important. The long line of the ordinary typed manuscript is convenient for the type-writer, but it is fatal to the reader. The effort necessary to catch the right line as the eye returns to the left-hand margin of the paper consumes energy which should be devoted to securing that mysterious *rapport* that must be established between reader and hearer if the function is not to be a painful one. For the same reason the type must be good and black, and the lines far apart. Whatever contributes to the physical ease of the speaker conduces also to that free and undistracted state of mind which is indispensable to the securing of the desired *rapport*.

5. Better still—make a mental note of the *Art und Weise* of those men of science (half our number perhaps) who, whether by instinct or by early training, know how to address an audience effectively. There is a subtle mental attitude about them, quite aside from physical details, which can perhaps be better caught by instinctive imitation than by conscious intention. May their tribe increase!

6. If, in addition, every individual reader would, in his own interest, see to it that there is enough oxygen in the audience-room to permit of ready comprehension on the part of his hearers, then indeed would the mid-winter scientific meeting become such a joy to the spirit as would brighten, in retrospect, many a coming month of solitary hard labor.

The essential matter of inspiring papers is always at hand; a little furbishing up of method of presentation is all that is needed to make that matter far more effective, in the way of presentation, than it is, too often, at present. Of this the reader may be certain—if he insists upon beginning his paper with his voice thin, low and veiled, and directed downwards upon the floor instead of outwards

towards the level of his hearers' ears, the spirits of his auditors, so far as they have any esthetic quality at all, will also descend to their boots, and will remain there until another speaker gives them a chance at better nourishment. X. Y. Z.

SCIENTIFIC BOOKS

Principles of Microbiology. By V. A. MOORE. Ithaca, N. Y., Carpenter & Co. Cloth. Pp. xl + 506, 101 illustrations. \$3.50.

It is unfortunate that the limited field which this book covers was not indicated in the main title. For as the subtitle tells us it is a "treatise on bacteria, fungi and protozoa pathogenic for domesticated animals." Even then it does not claim to be complete, but, as the author says, is a "text-book for veterinary students beginning the study of microbiology. It is not exhaustive but rather elementary in character."

The first 188 pages and the last 65 are given over entirely to the discussion of general bacteriological matters along the same lines that we find in any of the half dozen books on general bacteriology. As we look through the list of chapters we find the same familiar titles as in all the others: Historical Sketch, Bacteria and their Place in Nature, Morphology of Bacteria, Classification, Bacteriological Apparatus, Sterilization and Disinfection, Preparation of Culture Media, Isolation and Cultivation of Bacteria, Microscopic Examination, Vital Activities of Bacteria, Relation of Bacteria to Disease, Use of Animals, Bacteriology of Water and Milk, Immunity, Serum Diagnosis and Vaccine Therapy. The remaining 253 pages, or just half the book, treat of the application of these general principles to veterinary matters.

Although we recognize the fact that the book is intended only for beginners and does not pretend to be complete yet we feel that the half of the book dealing with general bacteriology might with advantage have been left out altogether. For this general part while admittedly incomplete does not in many instances give as good, nor as accurate and up to date discussion of the topics mentioned as