

as for men of science that scientific work should be adequately recognized and supported. We are consequently in the fortunate position of knowing that whatever we do to promote our own interests is at the same time a service to the community and to the world.

The editorial work and difficulties in the preparation of the book are great; the costs of preparation and

publication are large. The editors ask those engaged in scientific work to continue the cooperation that they have given in connection with the earlier editions over a period of thirty-five years.

J. McKEEN CATTELL

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SCIENTIFIC BOOKS

GEORG WILHELM STELLER

Georg Wilhelm Steller, the Pioneer of Alaskan Natural History. By LEONHARD STEJNEGER, Cambridge, Mass. Harvard University Press, 1936. Pages i to xxiv, and 1 to 623. Frontispiece in color of Catesby's and Steller's Blue Jays; headpiece, the Free Imperial City of Windsheim; and plates 1 to 29. Price, \$6.00.

THE cross marking Steller's grave and the grave itself have long since washed away; but the young and enthusiastic German naturalist, for twelve years in the employ of the Imperial Academy of Sciences of Russia, has a much greater monument in the biography just published by Stejneger. There is no one so competent to write such a book. As he says in his introduction, the subject of this biography was thrust upon him and was not picked out by choice. Its inception dates back to the days when Professor Spencer F. Baird, secretary of the Smithsonian Institution and director of the National Museum, commissioned the author to go to Bering Island to investigate rumors about the Steller sea-cow, which the hero had discovered on Bering's ill-fated expedition to Alaska. At that time Stejneger spent two summers and one winter (1882-1883) on the Komandorski Islands and Kamtchatka, the winter being passed on Bering Island where the remnants of Bering's crew, including Steller, wintered in 1741-42. Since then Stejneger has visited Bering Island four times, but for much shorter stays. It is no wonder that he became interested in the life of Steller.

Stejneger was more fortunate than Steller; for, though he never saw a live sea-cow, he brought back skeletons, while Steller, for lack of room on the rebuilt *St. Peter*, was permitted no space for carrying to Kamtchatka such a large animal.

During his visit Stejneger made a detailed map of the island, every part of which had been traversed by Steller or the other survivors. This map was used as the topographical basis for the work of the Russian Geological Survey.

There is practically nothing in Steller's life that Stejneger has omitted. Beginning with his family history, his birth on March 10, 1709, Plate 1 is a photo-

static copy of the page of the St. Kilian Church register, Windsheim, showing the record of Georg Wilhelm Stöhler's baptism. When Stöhler entered the Russian service, he found no satisfactory equivalents of the letters of his name and so changed it to Steller. In 1927 the author visited Steller's birthplace, and in 1930 went to Halle to look into his university background. He also searched libraries and obtained many photostatic prints of manuscript records regarding Steller's life. Steller had a gifted mind. He was a theologian, physician and, most of all, a naturalist. He was a true "medical truant." Only three times in the book does the reviewer recall references to Steller as a physician: first when he early entered the Russian Army service, later and foremost during the outbreak of scurvy aboard Bering's vessel, the *St. Peter*, on the second Kamtchatka Expedition, and finally when he was critically ill and refused to take medical advice, saying that he was a medical man capable of looking after others and also himself. The outbreak of scurvy is excellently described. It is interesting that two naval surgeons of the second ill-fated Kamtchatka Expedition, both Germans, Johan Theodor Lau and Heinrich Schäfer, attended Steller in his last illness (1746) at Tyumen, Siberia, although they had not been assigned to the *St. Peter*.

One is struck with the absence of a portrait of Steller, until on page 157 he reads: "Unfortunately no description of Steller's physical attributes has been handed down to us, much less any portrait." His mental characteristics are better known, namely, that he was high-strung, temperamental and indefatigable. His industry and innate optimism are well brought out, for, when shipwrecked on an unknown island (Bering), he wrote the manuscript of "*De Bestiis Marinis*" when other men would have bemoaned their fate.

Forty-four pages at the end are designated as appendices:

- A. A description of the pictures of the sea-cow. [Exterminated in 1854, if not earlier.]
- B. Steller as an ichthyologist.
- C. Steller as a botanist.
- D. Steller's hitherto unpublished letter [to Johann Georg

Gmelin] dated Jan. 14, 1740. [A report of his activities.]

E. Steller's *Catalogus Plantarum intra sex horas in parti Americae septentrionalis juxta promontorium Eliae observatarum anno 1741 die Iulii sub gradu latitudinis 59*. This is the first list of Alaskan plants, about 150, and shows what an indefatigable collector Steller was.

The frontispiece is a copy of Catesby's blue jay, *Cyanocitta cristata*, of the eastern United States as contrasted with the western blue jay, *Cyanocitta stelleri*. It was the presence of this blue jay that made Steller sure North America had been reached; and this is an illustration of the remarkable memory Steller had, as he had once seen a copy of Catesby's work in St. Petersburg many years previously, before he started on his extensive travels.

Stejneger's narrative of the voyage of the *St. Peter* under Commander Vitus Bering¹ from Kamtchatka to Kayak Island, Alaska, until it was shipwrecked at Bering Island, then the making of the new but smaller *St. Peter* and its voyage to Kamtchatka is as interesting reading as Conrad.

The book is more than a biography of Steller, because it gives an account of the history, customs and manners of Russia in Steller's time, two hundred years ago, also much about the lives of his associates. It is well illustrated, but one regrets that it does not contain more plates. The author has left no stone unturned in acquiring facts about Steller's life, either by travel or by correspondence. It is concluded with a bibliography of two hundred and fifty-one titles, many of them in the Russian language. Steller's share in it is seventeen titles written in German and Latin, all the seventeen, except one, published posthumously. The index is complete both as to subject-matter and scientific names. The volume is a model of book-making, well bound and printed on an excellent grade of paper.

M. W. LYON, JR.

RAFINESQUE

Rafinesque's Kentucky Friends. By HARRY B. WEISS. Privately printed. Highland Park, New Jersey, 1936. 70 pp., 25 portraits. For sale by the author (price \$7.50), Highland Park, New Brunswick, N. J.

DAVID STARR JORDAN thus characterizes the subject of this little book, "Brilliant, erudite, irresponsible, fantastic, he wrote . . . of the fishes of the Ohio River with wide knowledge, keen taxonomic insight, and a hopeless disregard of the elementary principles of accuracy. Always eager for novelties, restless and

¹ One member of the Danish family Bering, using the name Bierring, served in the American Navy during the Civil War, and his son was president of the American Medical Association recently.

credulous, his writings have been among the most difficult to interpret of any in ichthyology."

Constantine Samuel Rafinesque (1783-1840) was born at Constantinople, the son of a French father and of a German mother born in Greece. His early boyhood was spent mainly in Italian seaport cities. In 1802 he came to Philadelphia, but returned to Italy in 1805. The next 10 years seem to have been spent in scientific work in Sicily, but in 1815 he came to America again. In Philadelphia he met Mr. John D. Clifford, of Lexington, Kentucky, and was invited by him to visit his home in Lexington. In May, 1818, Rafinesque started, making the trip by stage, boat and on foot. Clifford persuaded Rafinesque to come to live with him in Lexington and promised to procure for him a professorship in natural history in Transylvania University. Rafinesque returned to Philadelphia, shipped his books and collections to Lexington, and himself returned there in the summer of 1819.

Dr. Weiss devotes 14 pages of his book to Rafinesque's life in Kentucky: to his teaching in the university, to his scientific trips and collections and to his scientific writings and publications while there, and particularly to his relations with the people among whom he lived. Because of his exaggerated temperament, he was a very difficult person to live and work with, especially after he developed a persecution complex. But all this is set out in Dr. Weiss's sketch and need not be gone into further.

Rafinesque was a talented artist, as is vouched for by the 25 sketches which are reproduced in the book. He seems to have been in the habit of sketching his friends or acquaintances at any time and place. Among these sketches are drawings of his mother, sister, and either of his wife or her sister. The others are chiefly of men and women prominent in the political and social life of Lexington and of Kentucky. The unidentified portraits are mainly of girls and young women, possibly children of his friends.

One is disappointed not to find any record of the whereabouts of the original sketches. These sketches have little value to the man interested in Rafinesque's scientific work. But as documents in the history of Lexington and of Kentucky of the time covered by Rafinesque's life in Lexington they are of undoubted value.

E. W. GUDGER

IN HONOR OF PROFESSOR HONDA

Professor K. Honda Anniversary Volume. October, 1936. Sendai, Japan.

THIS volume of more than 1,100 pages is published in the series of Science Reports of the Tôhoku Imperial University, Sendai, Japan, as a tribute to Professor Kôtarô Honda, now president of the university,