

from St. George Island to St. Paul Island, but there is no evidence to show that they survived in their new habitat.

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#### APROPOS THE "WHITE INDIANS" OF DARIEN

THE following is a quotation from Joseph Esquemeling, "The Buccaneers of America,"<sup>1</sup> Chapter XXV, published in 1699. Esquemeling is describing his own personal observations.

We sailed from thence [Bocca del Toro] March 23, 1679, and in our way touched at the islands called Zambles. These islands reach eight leagues in length, lying fourteen leagues westward of the River Darien. Being here at an anchor, many of the Indians, both men and women, came to see us. . . . The men here go naked, . . . The men paint themselves sometimes with streaks of black, and the women with red: The women have in their noses a pretty thick ring of gold or silver, and cover themselves with a blanket only: they are generally well featured; *among whom I saw several fairer than the fairest of Europe, with hair as white as the finest flax; 'tis reported of them, that they see better in the dark than in the light.*<sup>2</sup>

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#### SCIENTIFIC BOOKS

*Helmholtz's Treatise on Physiological Optics.* English Translation from the Third German Edition. Edited by JAMES P. C. SOUTHALL. Volume II, "The Sensations of Vision," 1924, viii + 480 pp.; Volume III, "The Perceptions of Vision," 1925, x + 734 pp. Published by the Optical Society of America.

THE appearance of the third volume of the English translation of Helmholtz's great "Handbuch der physiologischen Optik" completes one of the most notable scientific publications of recent years. Helmholtz's "Optik" is a unique book from many angles. It is unique in the thoroughness with which it displays the versatility of the master scientific mind of the nineteenth century. It is unique in the completeness with which it summarizes and establishes the science of physiological optics. Even more, it is unique in its longevity; originally decades in advance of its times, its friends have not permitted it to grow old;

<sup>1</sup> Edition of 1853, Benjamin B. Muncey & Co., Boston, pages 180-.

<sup>2</sup> Italics mine.

they have dressed it in many new chapters and appendices and its original vigor has carried it on for seventy years. The present English translation, by Professor Southall, provides the English-reading public with something more than a newly intelligible classic; it offers an up-to-date compendium of the most fascinating branch of optics. In its field, Helmholtz's treatise has no rivals and is unlikely to have any for years to come. What modern scientist would dare to write a book like this, even if he were able to do so? What publisher would dare to print it as a commercial venture?

To review the contents of so classical a work seems supererogatory and anachronistic, yet there may be those to whom such a review may convey an impression which they had previously lacked. The first German edition appeared in three parts, during the years 1856, 1860 and 1866, respectively; forming *Band IX* of Gustav Karsten's "Allgemeine Encyclopädie der Physik." The work was combined into a single volume with the imprint of Leopold Voss, of Leipzig, in 1867. (The reviewer has a copy from the library of William James, marked "Dresden, June, 1868" and containing the personal cards of "Dr. Hermann von Helmholtz, Präsident der Physikalisch-Technischen Reichsanstalt. Berlin, 16. Neue Wilhelmstrasse," and "Frau von Helmholtz geb. von Mohl.") A translation into French was published in 1867. A second German edition began to appear in 1885 but was not completed until after the death of Helmholtz, which occurred in 1894. As a single volume, under the editorship of Arthur König, it was published by Voss in 1896. This edition had been extensively revised and brought up to date by Helmholtz and König. It met with less favor from critics than did the first edition, and when Gullstrand, von Kries and Nagel prepared the third German edition (1909-1911), they based it upon the original text.

The present English translation is from the third German edition. It offers all the detailed appendices which were added by Gullstrand, von Kries and Nagel, and is further supplemented by new appendices and notes, some of which are by the German editors just named. It is perhaps regrettable that certain of Helmholtz's theoretical discussions, peculiar to the second edition, could not have been included. This is especially true of the second part or volume, dealing with visual sensation, to which Helmholtz made some very interesting additions. However, the subject-matter of these additions is treated in the appendices in a manner technically more adequate than that of Helmholtz, if lacking in the touch of his master mind.

The first of the three volumes of the English edition has already been reviewed in these pages. It deals