during some fifteen voyages along the south and west coast of Africa. This book would be supposed from its full title to be a geographical or statistical work from a military point of view. It does indeed present facts of this character, but also much more. Written in an easy and unassuming style, the author has skilfully combined with an account of the chief geographical and economic features of the islands, a description of their attractions, their peculiarities, their odd or extraordinary inhabitants, and a great variety of extremely amusing anecdotes. We believe those of our readers who may be led by this notice to peruse it will find themselves abundantly repaid.

St. Helena is first described, rather briefly, as already much written about; then follow Ascension, Fernando Po, the Isles de Los, St. Vincent, San Antonio, Goree, Grand Canary, Teneriffe and Madeira. Some information of a strictly veracious character will also be found in regard to the miraculous island of St. Brandan.

One of the most singular spots is the Island of Ascension, which belongs to the British Admiralty, and is enrolled in the list of ships in commission under the title of 'the tender to H. M. S. Flora.' This originated in the fact that a vessel of that name was once anchored off the island as a storeship, and part of the stores were kept on shore. Naval discipline is maintained, but a few ladies, wives of the officers exiled to this barren spot, are allowed to remain here, submitting to naval routine, which includes all lights out by 10 P.M. There is no water except intermittent collection of rain or dew, insufficient for the needs of the inhabitants. Nothing can be cultivated, though a few green things grow on the peak of one of the higher hills and in some narrow ravines which concentrate the scanty dews and showers. Sea turtles and terns, locally known as 'wide-awakes,' are the sole edible productions. Cows are brought there, and at first supply a small quantity of milk. which is reserved for the hospital. Should there be a surplus it is sold, a bell being rung to announce the event, but nobody is allowed to buy more than one gill. After a time the milk dries up and the cow is turned into beef to save her from starving to death.

An American returning to England on the same steamer with Major Ellis, went ashore to look at the island, and came near running against an officer with flaxen whiskers, who suddenly issued from a building. The officer raised his eye-glass, looked at the stranger with astonishment, and before the latter could apologize, called out : "Simmons!" A bearded seaman responding, "Ay, ay,

West African Islands. By Major A. B. ELLIS. London, Chapman & Hall, 1885. 8+352 p., 8°. sir," appeared upon the scene. The officer continued : "Simmons, do you know what this person wants, or who he is?" "No, sir; I can't say, I'm sure, sir." The American began to explain : "Sir, I am a citizen of the United——" when the naval man interrupted him and said : "Simmons, do you think he is a stowaway?" "Can't say, sir, I'm sure," replied the imperturbable Simmons. "Is there a merchant steamer at anchor there ?" "Yes, sir, Cape mail, sir." "Well, Simmons, just go to the officer of the watch, and ask if he has given permission to any person to board us. And, er-, see what this person wants." The American, now very angry, began again : "Sir, I am-" when he was again interrupted by the officer: "Simmons, I am engaged now. I cannot see this person. Perhaps you had better take him to the officer of the watch." And he went off before all the terrors of the United States could be launched upon his head; while the seaman, grinning respectfully, when his superior's back was turned, conducted the irate Yankee to the officer at the landing place, with whom he had but just come ashore. Sociable fellows, our British cousins, even on a desert island !

EDWARDS'S BUTTERFLIES OF NORTH AMERICA.

THE perseverance with which Mr. W. H. Edwards has continued his study of the butterflies of this country, and the liberality with which he has illustrated their various forms, ever since he first began the task, are worthy of all praise. The completion of his second series furnishes occasion to draw attention to its excellence. When Mr. Edwards first advertised, in 1868, that he would attempt a complete work, with ample illustrations, on the butterflies of North America, he probably little understood the nature of the task before him, or foresaw into what fields his work would carry him. Notwithstanding all he has accomplished, the horizon, broadening with his work is as distant as at the start. At first his iconography was almost exclusively given up to the mere description of species, with no attempt to illustrate anything but the perfect insect. Indeed, the work proceeded for nearly three years before the first illustration was given of the earlier stages of a single butterfly. Since that time but a single number has appeared which did not contain one

The butterflies of North America. By WILLIAM H. ED-WARDS. Second series. Boston, Houghton, Mifflin & Co., 1874-1884. [445 p., 51 pl.] 4°. or more plates devoted in part to the illustration of the earlier stages of our butterflies, while the text has constantly improved from that point up to the present time; a far larger proportion of the space being now occupied in treating of the biology and distribution of butterflies, and with their climatic and seasonal variations—the latter a study in which our author has taken the first rank in this country.

The first series of parts was completed in five years; the second has occupied more than ten for its issue. But the value of the second, with twenty-seven out of its fifty-one plates devoted in part to illustrations of the earlier stages, is beyond comparison more valuable than the first series, in which only nine out of the fifty plates contained any illustration whatever of the earlier conditions of the existence of these animals. As to the execution of the plates, no iconography of the present time excels them; in faithfulness and sobriety of color, in gracefulness of disposition upon the plates, in artistic execution and in faithful representation of the minutest details, they surpass anything that has been given to the world from the most famed *ateliers* of Europe. There is little inequality about them. They are uniformly exquisite, and lepidopterists the world over are indebted to Mr. Edwards for the faithfulness and luxury of his illustrations. By text and plates he has enriched the natural history of our native butterflies to such an extent, during the seventeen years in which these two volumes have been passing through the press, that the butterfly fauna of the United States is now quite as well known and illustrated as that of any equal region elsewhere, not excluding the long gleaned fields of Europe.

The manufacture of the book is equally creditable, with the single exception of the difficulty of reference. By the system adopted it becomes necessary to refer to plate 'Papilio 8B,' for instance, instead of to a single number. So also the text is unpaged, excepting in a few instances where it is separately paged throughout a single part, as in 'Lycaena II.-III.' The author's intention is that at the close of the volumes text and plates shall be re-distributed and bound in an order fixed by himself, and then numbered in pencil; and he gives, therefore, a numerical order to the plates. But this is a most unsatisfactory method, and there is no index to the volume, so that any reference to the text is troublesome and vague.

In closing the first series of his 'Butterflies,' Mr. Edwards gave what he termed a 'Synopsis of North American butterflies,' with ample reference to the literature of the subject. This he has wisely discarded at the close of the present volume, substituting therefor a merely nominal list of species. In this, however, in which the number of species is raised from 512 to 612, he retains in nearly every particular the antique classification adopted in the first volume. The studies which Mr. Edwards has undertaken upon the history of butterflies have rendered him an authority on that subject, and his skill in field investigation has been unexcelled. This, however, constitutes no claim whatever to any knowledge of the structure itself of butterflies. upon which classifications must be founded; and as he has shown no such knowledge in his writings, we can only regret that he did not altogether omit this list, since it carries an authority to the public eye which it does not possess, the classification being not only faulty in many minute particulars, but fundamentally false to nature.

LIPPS'S PSYCHOLOGICAL STUDIES.

THIS firmly and clearly-written volume is the work of a very acute and able man. No competent person will read it without wishing to read the other work to which its author refers.--his 'Grundthatsachen des seelenlebens' (Bonn, 1883). One can never do justice to a psychologist without knowing the ensemble of his views; and as we have not yet seen the larger volume, our own notice better be descriptive than critical. There are two essays in the work before us; one on visual spaceperception, the other on the essence of musical harmony and discord; and both stick close to the particular matter in hand. In the space-perception essay, these topics are treated of: the nature of seen distance, the continuity of the field of view as connected with the filling out of the blind spot. and the space intervals seen between different retinal spots when the latter are excited. On all these subjects Dr. Lipps's views are thoroughly original. To take the last one first; it is an empirical fact that (distance and eye-position being equal) an object appears of about the same size to us, no matter on what part of the retina its image falls; why is this so? why, on the whole, do equal retinal distances correspond to equal extensions seen? The simplest answer is that they have an inborn tendency to do so, of which we can give no farther account. This answer is nowadays unpopular-notwithstanding the very great ability of some of those who defend it, first because it is the fashion to substitute genesis for innateness everywhere in our explanations just now, and second because there are *variations* in the judgments of size, shape, distance apart, etc., which we get from the same retinal tracts, under different

Psychologische studien. Von Dr. THEODOR LIPPS. Heldelberg, Weiss, 1885, 161p.