

Eleventh and Clinton streets, Philadelphia, and will use it for laboratory purposes.

THE late Sir Donald Currie's daughters, Mrs. Mirrilees and Mrs. Percy Molteno, have given a sum of £25,000 to the University of Cape Town for the construction of a hall as a permanent memorial to Sir Donald Currie.

THE alumni of Brown University by a vote of 2,008 to 223 favor the removal of the denominational restriction which requires the president and the majority of the trustees to be baptists.

It is reported that from the answers to several hundred letters sent by Yale University to heads of preparatory schools and public high schools, the majority favor science and history as substitutes for Greek at the entrance examinations of the academic department. The changes will, it is said, probably be adopted at the entrance examinations in 1911.

DR. GEORGE BLUMER, professor of medicine, will succeed Dr. Herbert E. Smith as dean of the Yale Medical School.

MR. H. N. EATON, instructor in geology in the University of North Carolina, has been appointed to a similar position in the School of Mines, University of Pittsburgh.

SCIENTIFIC BOOKS

Charles Darwin and the Origin of Species.

By E. B. POULTON. London and New York, Longmans, Green & Co. 1909.

Professor E. B. Poulton, Hope professor of zoology in Oxford University, has long been known as the leading proposer and defender of theories of mimicry, warning, directive and recognition coloration and the like. Next to the names of Bates and Müller, which are names of the pioneer observers and hypothesis makers in this field, stands the name of Poulton.

The name must now be associated with another distinction; it is that of the most loyal present-day disciple of Darwin. Poulton is a whole-hearted acceptor and ardent defender of everything that came from the mouth and pen of his immortal master.

There are no mental reservations about Professor Poulton's Darwinism; no interpretations other than the obvious ones; no buts nor howevers.

In his addresses (which I have referred to recently in other pages of this journal) at Baltimore in January, 1909, before the American Association for the Advancement of Science, and at Cambridge in June of the same year at the great Darwin Commemoration Meeting, Professor Poulton was the conspicuous exception among the other speaking biologists in his unreserved acceptance and defence of Darwinian selection as the all-important factor in species-forming and evolution. He now appears as the author of a book explicitly given to the exposition and defence of this factor and to the answering of its critics.

The book comprises the two addresses already mentioned, together with two lesser ones given as banquet speeches on the same general occasions; another given at the Oxford Darwin celebration in February, 1909; an anniversary address given in December, 1908, before the Entomological Society of America in Baltimore; a group of about twenty hitherto unpublished letters written by Darwin to Roland Trimen between 1863 and 1871; and four brief appendices including notes on Darwin and the hypothesis of multiple origins, Darwin and evolution by mutation, Darwin's health and work, and De Vries's fluctuations as inconsistently treated by certain English believers in them. The whole collection is the consistent utterance of a perfect Darwinian.

The new Darwin letters do not add much to our knowledge of the master's personality, but they are interesting. They are full of glimpses of hard and constant work and continuous and interfering ill health. They touch especially—and this is their particular interest to Professor Poulton—the subject of color and pattern (Trimen was a devoted observer in this field). All the references to this subject are, however, tinged with the sexual selection hypothesis which was more importantly in Darwin's mind than any hypoth-

esis of mimicry or the like. There are some very quotable bits in the letters. In a letter of April, 1868, Darwin writes:

Many thanks for your Photograph, and I send mine, but it is a hideous affair—merely a modified, hardly an improved, Gorilla.

Mr. Trimen's first meeting, or rather first seeing, of Darwin, as described by him in a letter to Professor Poulton, is an interesting reminder of the reality of the heresy of the "Origin" in its first days.

It was in the Insect Room of the Zoological Department of the British Museum that I had my first glimpse of the illustrious Darwin. Towards the close of 1859, after my return from the Cape, I spent much time in the Insect Room identifying and comparing the insects collected with those in the National Collection. One day I was at work in the next compartment to that in which Adam White sat, and heard some one come in and a cheery, mellow voice say, "Good morning, Mr. White; I'm afraid you won't speak to me any more!" While I was conjecturing who the visitor could be, I was electrified by hearing White reply, in the most solemn and earnest way, "Ah, Sir! if ye had only stopped with the 'Voyage of the Beagle'!" There was a real lament in his voice, pathetic to any one who knew how to this kindly Scot, in his rigid orthodoxy and limited scientific view, the epoch-making "Origin," then just published, was more than a stumbling block—it was a grievous and painful lapse into error of the most pernicious kind. Mr. Darwin came almost directly into the compartment where I was working, and White was most warmly thanked by him for pointing out the insects he wished to see. Though I was longing for White to introduce me, I knew perfectly well that he would not do so; and after Mr. Darwin's departure White gave me many warnings against being lured into acceptance of the dangerous doctrines so seductively set forth by this most eminent but mistaken naturalist.

A little while afterwards, on the same day, I again saw Darwin in the Bird Galleries, where it was, I think, G. R. Gray who was showing him some mounted birds. A clerical friend with me, also a naturalist, curiously enough echoed White's warning by indicating Darwin as "the most dangerous man in England."

The most interesting of Professor Poulton's personal contributions to his volume are two

papers treating the special subject of his studies, namely, the addresses on "The Value of Color in the Struggle for Life" and "Mimicry in the Butterflies of North America." One is a suggestive general treatment of the use-of-color subject, the other a detailed special consideration of a suggestive set of illustrations of one phase of this subject. As an entomologist acquainted somewhat with the alleged mimicry case from the Pacific Coast which to Professor Poulton seems to be, if really proved, "one of the most interesting and instructive examples of mimicry in the world," viz., the resemblances between *Limenitis californica* and *L. lorquini*, I can only say that much more evidence than at present has been collated is necessary before this case can receive general acceptance. But this Professor Poulton also recognizes fairly, so any present hesitancy to see the pertinence of this example of mimicry can not be misconstrued by its sponsor. What is needed in this case is exactly stated by Professor Poulton, viz., "extensive investigations in America."

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Illustrations of African Blood-Sucking Flies other than Mosquitoes and Tsetse Flies. By ERNEST EDWARD AUSTEN, Assistant in the Department of Zoology, British Museum (Natural History), with colored figures by GRACE EDWARDS. London. 1909. Pp. 221, 13 colored plates.

Repeated demonstration of the agency of blood-sucking insects in the transmission of certain diseases invests with the greatest practical importance an accurate knowledge of the genera and species of these forms. Warfare against such diseases is now being carried on with great vigor in Africa and the volume under consideration has been prepared with a view to aiding in this contest.

In the preface the author mentions the plan of a general monograph on the blood-sucking insects which was originated by Sir E. Ray Lankester, when director of the natural history departments of the British Museum. Four volumes on mosquitoes, by F. V. Theobald,