

biology' from two of our leading universities, still has work to do. As Prof. Brooks tells us (SCIENCE III., p. 708), the Johns Hopkins University had not in the twenty years of its history examined a candidate for the doctorate in 'biology.' Yet this year, perhaps as a declaration of independence from the influence of Prof. MacMillan, it has conferred the degree of Doctor of Philosophy on a candidate who chose 'biology' as one of his subjects.

Questions of nomenclature seem to be more interesting to the botanist than to the zoologist, and it is not the present writer's intention to discuss this one. But the occasion seems favorable for asking Prof. MacMillan why it is that zoology has become to such a large extent synonymous with biology. Is it not, perhaps, because the zoologist is usually a biologist, whereas the botanist is usually only a botanist? The great advances which, during the past forty years, have transformed biology, have come almost exclusively from the side of the zoological sciences. Zoologists have not hesitated to use botany when they could, but in the advancement of biology, botany, even as a silent partner, does not seem to have contributed its share of capital.

Y.

AN UNCOMMON AFTER-IMAGE.

SOME days since, while traveling by boat, I awoke in the early morning, and, thrusting my head out of the window, was almost overpowered by the yellow glare. I then raised the blind with its yellow horizontal slats, and for a moment noticed the glare pouring through them. Then, shutting my eyes, I had for a few seconds an after-image of some half-dozen *vertical* green lines gradually fading away into *vertical* violet lines.

HIRAM M. STANLEY.

MACKINAC ISLAND, June 20.

THE NINE-BANDED ARMADILLO.

TO THE EDITOR OF SCIENCE: In his recent paper, in the *Bulletin of the American Museum of Natural History*, on mammals collected in Bexar County and vicinity, Texas, Prof. Allen refers to the capture of specimens of the nine-banded armadillo at several places north and west of Bexar County, but mentions none from

that county. It may be of interest, therefore, to note that five specimens were taken in the county in May, 1895, about four miles from San Antonio. There were two adults and three young, all captured immediately after a heavy rain which had driven them from their burrow. This family of armadillos was presented by Mr. F. Hardman, of San Antonio, to the National Zoological Park in this city, where two of its members may still be seen, apparently in excellent health.

A. B. BAKER.

WASHINGTON, D. C., June 22, 1896.

ROCHEFORT ON THE CARIBBEANS.

TO THE EDITOR OF SCIENCE: Appropos of the wonderful explorations of Mr. Frank Hamilton Cushing and his party in San Marco, Florida, last winter, under the auspices of the University of Pennsylvania, I would call attention to the following sentence in Rochefort (*Caribby Islands*, London, 1666, p. 291). Speaking of the Caribbeans he says: "Their Habitations are somewhat near one to another, and disposed at certain distances after the manner of a Village; and for the most part they plant themselves upon some little ascent, that so they may have better air and secure themselves against those pestilent flies which we have elsewhere called *Mosquitos* and *Maringoins*, which are extreamly troublesome, and whereof the stinging is dangerous in those parts where there is but little wind stirring. The same reason it is that obliges the *Floridians*, beyond the bay of *Carlos* and *Tortugues*, to lodge themselves for the most part at the entrance of the Sea in Huts built on Piles or Pillars."

O. T. MASON.

U. S. NATIONAL MUSEUM, July 2, 1896.

SCIENTIFIC LITERATURE.

Handbuch der paläarktischen Gross-Schmetterlinge für Forscher und Sammler. Zweite gänzlich umgearbeitete und durch Studien zur Descendenztheorie erweiterte Auflage, etc. VON DR. MAX STANDFUSS, mit 8 lithographischen Tafeln und 8 Textfiguren. Jena, Gustav Fischer, 1896. 8°. Pp. 392.

This is much more than an ordinary handbook for the lepidopterist, since it comprises a