

of the reserves mentioned are numerous lakes, and these are to be connected with wide roads, which, when completed, will, it is thought, form an effective obstacle to the progress of conflagrations.

UNIVERSITY AND EDUCATIONAL NEWS.

At the semi-annual meeting of the Board of Trustees of Beloit College it was announced that the College had received a gift of \$25,000 for the endowment of the chair of chemistry, now occupied by Professor E. G. Smith. The donor wishes to remain anonymous. It was also reported that the sum of \$70,000 had been raised toward the \$100,000 necessary to secure Dr. Pearson's gift of \$50,000.

MRS. DANIEL C. EATON has recently given \$2,000, the income from which is to be devoted to a scholarship open to competition by the graduate students of Yale University.

THE following assistants have been appointed in the Sheffield Scientific School of Yale University: C. B. Rice, in physics; W. G. Van Name, in biology; C. H. Warren and W. M. Bradley, in chemistry, and G. L. Bunnell, in zoology.

THE registration of students at the University of Pennsylvania for the year 1897-1898 is 2,834, an increase of 23 over the previous year. A decrease of 38 in the medical school is due to the raising of the requirements for admission. The officers of instruction number 258.

REPRESENTATIVE HAYES, of Lowell, has introduced into the Massachusetts House of Representatives a bill for a State appropriation of \$100,000 to the Lowell Textile School, one-half of the amount to be paid in 1898 and 1900. At the same session Representative Dubuque, of Fall River, introduced a bill for an appropriation of \$100,000 for the establishment of a school in that city upon the same lines as the one in Lowell.

DISCUSSION AND CORRESPONDENCE.

'WILD NEIGHBORS.'

EDITOR OF SCIENCE: A man who has been making books as long as I rarely 'talks back' to the critics. I never did so but once, and that was to rebut misstatements likely to injure the

value of my property. For the same reason I beg leave to reply to your recent notice of my book 'Wild Neighbors' (The Macmillan Co., 1897), first thanking you for such commendation as is given.

Alluding to the fact that in order to round the biographies of the various animals treated, and make them interesting, I drew upon the writings of several 'well-known' naturalists, the reviewer so states this matter as to imply that the whole book is nothing but a mosaic of quotations, 'direct and indirect' (oh, fie!), and later frankly says that it 'offers nothing in the way of new and original matter.' It would be possible to produce an interesting and even valuable book in that way; but, if by the latter phrases quoted above it is meant that the book contains nothing of my own observation, I must protest. The chapter on Gray Squirrels distinctly states that it is wholly personal experience, and I have certainly seen on several occasions each of the other mammals described. As I did not write the book to laud myself, but to set the subject well before the reader, it did not occur to me invariably to put in the big I, yet I have not yet heard any complaint as to stolen goods.

Your reviewer alleges that 'many misleading statements are made,' and in support of this makes a very erroneous one himself. "The reader is told," he says, "that the Eastern Chipmunk (*Tamias striatus*) is now conceded to be the only species ranging between the Atlantic and Pacific coasts, while in reality some twenty-two species and twelve subspecies are now recognized in the United States." The reader is not told (by me) anything of the sort. He is told that the early naturalists, lacking large numbers of specimens, made several distinct species, so-called, of what are now conceded to be only geographical varieties of the single species *Tamias striatus*. There is a sort of sneer in the reviewer's next remark: "Young opossums are said to go about clinging to their mother's tails soon after they are born." That is not altogether a fair way of putting my account of it; but—don't they 'sometimes'? Credible persons say they do—Flower and Lydekker, for instance. Then the reviewer asserts that my 'nomenclature is out of date, a large proportion of the

generic and specific names differing from those in present use.' This, if true, would make me feel worse had I written a technical treatise instead of an untechnical one; but I should be thankful for a count of examples justifying this broad condemnation. All my names in classification (mainly relegated to the Index) are certainly as modern as the latest editions of Flower's 'Mammals' and Newton's 'Dictionary of Birds,' and are such as Dr. Elliott Coues and Dr. Theodore Gill thought proper for the Century and Standard Dictionaries. If they conform to these standard books of reference, and are rightly applied, I can safely say that if I had known (as possibly I did) of trinomial or other novelties of nomenclature more recently introduced by some specialist I would not have used them in a book for popular educational reading. The only reason for printing a technical name at all in such a book is that it may assist the reader in identifying the creature for further study elsewhere—an object that would be defeated unless a well-known term were quoted. If the reviewer had commented in this spirit upon this point, criticising the paucity, or what he considers the antiquated character, of such nomenclature as he found, I should never have alluded to it; but as he seems to bring it forward only as another symptom of general worthlessness, I deny the deficiency he reports.

A reviewer may combat my opinions or arguments or literary expression, and I shall be patient; or, if he can find real errors as to fact (as this one and others have done in noting a regrettable slip about the nuthatch) I shall be sorry and docile; but when he misstates my language, and resorts to innuendo instead of criticism, I shall resent it. First of all, a reviewer ought to try to understand the *purpose* of the book before him.

ERNEST INGERSOLL.

NEW YORK, January 8, 1898.

IN replying briefly to the above, let me begin by quoting verbatim what Mr. Ingersoll does say about the Eastern Chipmunk: "The chipmunk (*Tamias striatus*) * * * *, whose color and stripes exhibited so many varieties between the Atlantic and Pacific coasts that early naturalists having insufficient specimens

described confidently as several species what is now conceded to be only one." But, as a matter of fact, the Eastern Chipmunk (*Tamias striatus* and varieties) does not range farther west than Iowa, while 22 distinct species are now recognized from the western United States. Since none of these are mentioned in the book, does not the author's statement imply that in his opinion *Tamias striatus* ranges across the continent and that all of the 23 species of chipmunks are now conceded to be one and the same?

In his reply to my criticism he attempts to put himself right by stating that the early naturalists 'made several distinct species, so-called, of what are now conceded to be only geographical varieties of the single species *Tamias striatus*.' But here he falls into another error, as he will himself discover if he attempts to hunt up the 'several distinct species' he imagines the early naturalists tried to make of this animal.

If the author had ever seen young opossums '*soon after they are born*,'—tiny, naked, helpless, blind, embryonic things, each clinging to a teat in the mother's pouch, where they are carried for a long period before sufficiently developed to even peep out of the pouch—he would hardly have ventured to assert that at this period they go about on the mother's back, clinging to her tail. The author implies that my criticism of his antiquated scientific names is based on his avoidance of 'trinomial or other novelties of nomenclature more recently introduced.' In this he is greatly mistaken, as a few examples will show. And it might be added, in spite of his remarks against the use of technical names in popular books, that he has himself, in the book in question, used the following, and all of them erroneously: *Hesperomys*, *Arvicola*, *Urotrichus*, *Syntheres*, *Sorex cooperi*, *Castor fiber*, *Canis lupus*, *Scapanus breweri* and others.

The trouble with the book, as a whole, is that it contains altogether too many loose and inaccurate statements. A book for 'popular educational reading' ought, above all things, to be reliable and to show a groundwork of scientific accuracy.

VERNON BAILEY.

WASHINGTON, D. C., January 21, 1898.