I know practically nothing at first-hand of German school-boys. But I am sure that the natural history interest was more general in my time at Oxford than it was among the German students I met at Leipzig. On German walking tours I have often been astonished at the ignorance of natural objects shown by my German companions; while my experience in England has always been that some one in the party knew the birds, some one the insects, some one the plants, some one the fossils—and that the rest were thirsty for information.

So I have been accustomed to regard an interest in natural history as the birthright of the English child. If this is mere insular prejudice, I must give it up; if it has the basis in fact that I think it has, I hope that Professor Packard will retract his 'even.' We owe a great deal to Germany; but—natural history!

On the general subject of nature study I may, perhaps, be allowed to say that—so far as I have followed the rather voluminous literature—it seems to have three dangers. The first is that, in striving for sympathy with nature, we run into sentimentality. The second is that, in avoiding fairy tales, we run into something ten times worse—if indeed fairy tales are bad at all; I mean, a pseudo-psychology of the lower animals. And the third is that, in trying to be exceedingly simple, we become exceedingly inaccurate.

E. B. TITCHENER.

CORNELL UNIVERSITY.

TREE TRUNKS FOUND WITH MASTODON REMAINS.

WHILE excavating the bones of a mastodon near Newburgh, N. Y., as mentioned in SCIENCE, October 10, 1902, there were found large numbers of tree trunks both in the muck and in the marl lying beneath it. In many instances the mastodon bones were found resting on these trees. While most of the trees were so rotten that it was possible to obtain only small fragments, several were recovered in lengths of two feet and over; and one in particular possesses curious interest, and some idea of its probable species would be welcomed by the writer. The tree was lying three feet below the surface, in muck, and was very soft and spongy; and not only on the surface, but clear through, was of a dark brown color, almost that of the muck, and perhaps colored by the muck. Its scientific interest rests upon the fact that in section it is polygonal, while the flat faces of the trunk that make up the polygon vary in number from fourteen to sixteen, some of the faces merging into one another at various points along the trunk. This piece of the tree is about three feet long, and when first dug out, about two months ago, was nearly nine inches thick at one end and six at the other; but it has shrunk on drying out, until now it measures five and three inches, respectively. No other pieces of this tree were found, although the adjoining layers of muck were carefully dug over and examined, in hopes of obtaining more of it.

With one exception, all the other tree trunks found were smaller than this one, few measuring more than five inches at the butt. Some were easily recognized as spruce and red cedar, and were in a fair state of preservation, except that when dry the large amount of shrinkage caused them to crumble unless carefully handled. Several trees showed while still wet the marks of the teeth of animals, and it has been surmised that this was the work of beavers. When dried, however, the tooth marks are much less distinct, and their study is thus rendered more difficult.

REGINALD GORDON.

THE CARNEGIE INSTITUTION.

THE Carnegie Institution shall devote itself essentially to the following subjects:

1st. To moralize scientific men.

2d. To protect investigators settled in countries where proper means be wanting.

3d. To depurate science. How to facilitate that.

4th. To advance science by a selection of studies.

1st. *To moralize scientific men.*

Secure priority of several important researches. Depurate the habits of both institutions and societies. Protect real scientists against upstarts, meddlers, courtiers and

speculators. Independ science from politics and religion. Condemn rivalry between scientists living in hostile countries. Constitute a court of arbitrament where consults be answered, contentions for priority settled, and complaints of subservients nullified by their superiors attended to.

2d. *To protect investigators settled in countries where proper means be wanting.*

Afford them money, laboratories, books and instruments. Establish illustrated publications and print the works of any solicitor, whatever his nationality may be, provided that his writings be important. Scientists are generally obliged to waste their money in order to satisfy editors. Erect libraries and found agencies where scientific books and instruments be sold at the very lowest prices. Science must not remain within the grip of speculators (trading editors and book-sellers).

The Carnegie Institution must not benefit the United States only. Its views must be more absolute; it must protect also those who sacrifice themselves for truth in poor or ignorant countries. Genius is not the exclusive property of the inhabitants of a nation. Establish *international* competitions, rewards, explorations, laboratories, museums, observatories.

3d. *To depurate science. How to facilitate that.*

Make science more popular. Translate many books. Attack the abuse of the nomenclature of natural history (excess of newly discovered species, subspecies, varieties, upper families; unnecessary innovations, an exaggerate dedication to nomenclature *with a view to satisfy vanity*). Study such nomenclatures as to enable everybody to understand technicisms.* Attack the abuse of useless neologisms and their duplication. Unify as much as possible the languages, measures, unities and conventional signs. Publish bibliographies and distribute them freely and *gratuitously* through the world.

4th. *To advance science by a selection of studies.*

Point out the more general and important topics. Set degrees to the value of investigations, repealing that propensity to an isolated and invariable consideration of details (newly discovered subspecies, histological cuts, new stars, lower specialties).

In short, the Carnegie Institution shall not devote itself to discover, but to facilitate the means of discovering to genuine scientists, whatever their nationality may be, constituting itself supporter of the often abused rights of the disinterested investigator or wanting inventor.

A. L. Herrera,
Chief of the Commission of Parasitology, Professor of Biology at the Normal School.
Bettemitas 8, México, D. F.

* A. L. Herrera, 'Nouvelle nomenclature des êtres organisés et des minéraux,' *Mém. Soc. 'Antonio Alzate,'* 1900–1902.

SHORTER ARTICLES.

THE FIRST USE OF MAMMALS AND MAMMALIANS.

In the *Popular Science Monthly* for September, 1902, I have stated that 'the first writer to use the English word mammals to any extent was Doctor John Mason Good,' but could not refer to any of his works earlier than 'The Book of Nature' (1826). His 'Pantologia' was not accessible at the time, but since has been put on the shelves of the library of the U. S. National Museum and on reference to Volume VIII. (1813), I find he formally introduced the English name then, under *Mammalia,* in the following words: "In English we have no direct synonym for this term; quadruped or four-footed, which has usually been employed for this purpose, is truly absurd, since one of the orders have [*sic!*] no feet whatever, and another offers one or two genera, that cannot with propriety be said to have more than two feet. We have hence thought ourselves justified in vernacularizing the Latin term, and translating mammalia, mammals, or breasted-animals."

In Volume XII., in the articles Quadruped and Zoology, Good also used the word *'Mammals' apropos* of the classification of Linnæus and in other places* and, also, in

* The volumes of the 'Pantologia' are not paged, the alphabetical arrangement having been thought to supersede pagination.