

The high school teacher should develop the power of reasoning and exact observation; the college teacher the power of generalizing and the creative faculty; he should strive to teach the student to think in the terms of his science. To do this he must himself be a creator; he himself must have engaged in lines of original thought and investigation; he must be a living spring, not a pail of water. I have heard it said that the best teachers are often those who have never been able to engage in original research. I am inclined to doubt this. Granted, the investigator may not have the power of fluent speech in the same degree as some others, but he has the inspiration; he has the 'point of view;' he is able to feel relationships and connections which the other cannot, and as a consequence is able to place his pupil's learning on a broader and more permanent basis.

Finally, the college is not the place for narrow specialization; in it the scientific student should still be laying his broad foundation, with the understanding that he must also be gaining a clearer view of the sister sciences which are related to and necessary for an understanding of that which he has chosen for his main subject. The college is no more than the high school the place for technical training, for the latter is never developed in its proper form unless its foundations are laid broad and deep, so that they will, without strain, support any superstructure which may be placed upon them. It is only when this is the case that the university development can have its proper meaning. The college should bring forth the man *prepared* to specialize, not the man who has, by a too early following of a narrow line, stunted his power of future development. The university should be able to take many things for granted; it should at once be able to devote its time to the growth of the professional biologist, physicist, chemist, mineral-

ogist or geologist; and, while, of course, it cannot lose sight of the fact that at no stage of the scientific career are the related sciences to be neglected, it should, nevertheless, be able to count on training proper and sufficient to fit the student for the original thought and work which must become a part of his being; for, if he wishes to accomplish anything, these habits must be with him through life.

In this way the scientific training of a student becomes a harmonious whole without break, let or hindrance, from the beginning in the secondary school up to the mature work of the investigator and teacher; for the members are of one race and of one people, forever whole and indivisible.

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*THE LACOE COLLECTION IN THE NATIONAL MUSEUM.*

IN SCIENCE for July 3, 1896, the late Dr. G. Brown Goode announced the very valuable gift of the 'Lacoe Collection of Fossil Plants.' At that time Mr. R. D. Lacoe, a leading business man of Pittston, Pennsylvania, presented to the U. S. National Museum by far the largest and most valuable collection of Paleozoic plants in America, comparing favorably with the richest collections of the same nature in European museums. Living in a region rich in fossil plants, and noting early in the seventies that no great collections of this kind were accumulating, and also that little or no attention was being given to securing American Paleozoic insects, which are among the rarest of fossils, he quietly set to work gathering material and assisting paleontologists in the study of his collections. The plant collection contains nearly 100,000 specimens and is stored in 1,000 museum drawers and many large exhibition cases. There

are about 750 types and illustrated specimens in the collection.

Recently Mr. Lacoe has presented the balance of his splendid collections, consisting chiefly of fossil insects. The liberality of the gift is as unfettered with conditions as its value is great. The collection is to be known as the 'Lacoe Collection,' and the only stipulation is "that it be accessible to scientists and students without distinction, provision being made for the proper preservation of the specimens from loss or injury."

Of the 182 described species of North American Paleozoic insects about two-thirds are represented in the 'Lacoe Collection' by the type specimens, besides many figured supplementary types. Of arachnids there are 62 specimens (14 types), myriapods 94 specimens (41 types), and insects 461 specimens, of which 116 species are described (136 types); about 300 specimens are unstudied. There is but one other Paleozoic collection equalling or exceeding in specimens the Lacoe Collection, namely, that from the coal fields of Commeny, France.

Of Tertiary insects from Florissant, Colorado, several hundred unstudied specimens and six described species are present, including a butterfly, one of the rarest of fossil insects. From the Tertiary of Oeningen, in Baden, there are about 3,500 specimens, of which about one-half (including about 428 species) have been studied by Mr. Samuel H. Scudder. Regarding this part of the Lacoe Collection Mr. Scudder writes (Geol. Mag. Dec. IV., Vol. II., 1895, pp. 116-122): "I have examined with some care his large collection of fossil insects from Oeningen, larger, perhaps, than any outside of Zurich, for it consists of about 3,500 specimens, of which fully one-half may be made use of to advantage.

"The 428 species which I have separated in Mr. Lacoe's collection are divided among

the orders as follows: Orthoptera 8, Neuroptera 13, Hemiptera 57, Coleoptera 294, Diptera 17, Hymenoptera 39." From the Mesozoic and Cenozoic of Great Britain there are about 250 specimens.

Of Crustacea there are about 170 specimens, of which 11 are types or figured specimens. Of fishes and reptiles there are some 300 specimens, about half of which were labeled or described by the late Professor Cope.

Mr. Lacoe intends to continue his interest in the increase and study of 'The Lacoe Collection.' With the numerous Tertiary insects from the Western States gathered by the United States Geological Survey and studied or to be studied by Mr. Scudder, the United States National Museum will have one of the most comprehensive collections of fossil insects extant.

Dr. Goode's appreciative words regarding the plant collection are also applicable to the insect collection: "The acquisition of this wealth of material makes the National Museum an important reference center for all future comprehensive work in this field. The Lacoe Collection is a noble monument to the public spirit and generous enthusiasm of its founder."

#### A NEW NAME FOR THE GEORGIA OLD FIELD MOUSE.

IN my 'Land Mammals of Peninsular Florida and the Coast Region of Georgia,' (Proc. Boston Soc. of Nat. Hist., Vol. 28, No. 7, pp. 202-203, March, 1898), I described under the name '*Peromyscus subgriseus arenarius*,' the dark-colored form of the old field mouse found by Mr. W. W. Brown, Jr., on the sand hills about Hursman's Lake (Savannah River), near Bascom, Scriven Co., Georgia. After my manuscript had been turned in I noticed that I had used a name already given to a *Peromyscus* by Dr. E. A. Mearns. (The *Peromyscus eremicus eremicus* Mearns, Proc. U. S.