Every subscriptien will be promptly acknowledged by a formal souvenir receipt, bearing the portrait of Lavoisier in prison. The original individual subscription papers will be bound and deposited in the Archives of the Academy.

While the American committee was rather late in beginning its work, we are advised that its efforts are slowly bearing fruit. Let every one who reads these lines join in the good work, giving money in accordance with his means and his regard for the conquests of the pioneer who wrought so well in laying the fundamentals of chemical science.

EDGAR F. SMITH.

UNIVERSITY OF PENNSYLVANIA.

SCIENTIFIC LITERATURE.

List of the Vertebrated Animals now or lately living in the Gardens of the Zoological Society of London. London, Longmans, Green & Co. Ninth edition. 1896. Pp. xvi+724.

The preface to this work states that its principal object is to facilitate the naming of specimens and to render nomenclature uniform. \mathbf{It} is merely a transcript of the Society's register of accessions illustrated by a few cuts from the proceedings. Its value would have been greatly increased had there been added statistics showing the number of each species present, the average life of each and the number and causes of the deaths. As the volume treats of all animals that have been in the garden during 12 years past, and embraces 2,557 species, a vast amount of information might thus have been given which would have been of great benefit not only to those having collections in charge, but to pathologists and biologists generally.

We are able to gather from the list some idea of the number and kinds of animals born in the gardens during this period and thus judge how far the conditions were favorable for breeding. Some rather unexpected results are met with. We will consider the mammals only. The lemurs breed much more freely than monkeys; the lion is the only one of the cat tribe that is prolific, though our own puma is credited with five births. Among Esquimaux dogs there were but 9 births; the dingo has 15. From an apparently large number of raccoons but 8 were born, and among 52 squirrels (Sciurus vulgaris, common to the British islands) there were no births. On the other hand 14 beaver (Castor canadensis), 6 bison (B. americanus), 19 American elk, or Wapiti (Cervus canadensis), 35 mule deer (Cariacus macrotis) The South African fruit bats were born. (Cynonycteris collaris) produced 44, and the gerbilles, rat-like animals from western Asia and North Africa, threatened to become a nuisance, the birth of no less than 225 being recorded. Other notable births were 47 covpus, 13 yaks, 11 gayals (Bibos frontalis), 18 Himalayan sheep (Ovis burrhel) 15 Barbary sheep (Ovis tragelaphus), 43 Japanese deer (Cervus sika), many kangaroos and phalangers.

Certain species that breed freely in American zoological collections appear not to have bred at all or but rarely. Among these may be mentioned our coyote, prairie dog and chipping squirrel (*Tamias striatus*) the collared peccary, the Virginia deer, and even some domesticated animals like the camel, the llama and the zebu. Some of these results could doubtless be explained were the circumstances of each case fully known. FRANK BAKER.

SMITHSONIAN INSTITUTION.

Genius and Degeneration. A Psychological Study. By Dr. WILLIAM HIRSCH. D. Appleton & Co. 1896.

This work is published in the same style type as Nordau's 'Degeneration' and is announced as an answer to the latter work. An accompanying circular assures us that Dr. Hirsch 'absolutely refuses to accept Dr. Nordau's conclusions.' This at once removes a good deal of tension from the inquiring critic and leaves him the simpler tasks of finding out who it is that thus deals in the absolute and what are his reasons for so firm an implantation of himself upon an adverse position. The opening chapters of the book discuss the position of modern psychiatry and the nature of insanity and of genius. It is shown that neither of these latter things represents a very definite psychological concept. The author then takes up the relations of genius and insanity to each other. He shows that they are not identical and that "genius resembles insanity as gold resembles