printed in full in the Chemical News. The discovery of the element, to which at first the name monium was given, resulted from photographic researches on phosphorescent spectra, it giving a very characteristic group of lines in The concentration of victhe ultra-violet. torium is accomplished first by the fractional decomposition of the mixed nitrates of the yttrium metals by heat. The nitrates of the earths of the cerium group decompose more readily, and those of the yttrium group less readily than that of victoria, so that after a large number of fractionations the victoria col-These middle lects in the middle portions. fractions are then submitted to fractional precipitation with oxalic acid, many times repeated, and finally the portions richest in victoria are converted into sulfates and fractionally precipitated with potassium sulfate. In the purest condition thus far obtained, victoria is a pale brown powder, less basic than yttria and more basic than most of the oxids of the terbia group. Assuming the oxide to be Vc_2O_3 , the atomic weight of victorium is about 117. The most marked characteristic of victoria is its spectrum.

J. L. H.

ZOOLOGICAL NOTES.

In the annals of the South African Museum, Mr. L. Péringuey describes a method, discovered by Rev. J. A. O'Neil, for capturing both sexes of the members of the hymenopterous genus *Mutilla*. By seizing the female in such a way as to induce her to produce her well-known stridulation, the males immediately appear and are easily secured, at times even settling on the hand of the captor. As the sexes are certainly known in but 16 out of the 169 South African species, the practice of this 'sembling' method, as it is styled, is to be recommended.

THE report of the Australian Museum for 1897 records the mounting of a specimen of the Galapagos tortoise *Testudo nigrita* brought to Sydney, New South Wales, by the American whaler *Winslow*, in 1853. At that time it weighed 53 pounds, while at the time of its death, in 1896, its weight had increased to 368 pounds, a more rapid rate of growth than such animals are usually credited with. ACCORDING to Mr. Etheridge of the Colombo, Ceylon, Museum, by far the largest cobra ever recorded is one measuring 7 feet 9 inches taken at Jaffna, but as the measurement was made on a skin, it is possible that the maximum length attained by this deadly snake is not far from 7 feet 6 inches.

MR. ETHERIDGE discusses the use of formol at some length, stating that its great fault is its bleaching property, and that pure glycerine can alone be trusted to keep color, because it excludes those great destroyers of animal colors, air and water. Formol in combination with various salts will preserve color for a greater or less length of time, but not permanently. Thus a three per cent. solution of formol, saturated with common salt, preserved the color of Oreastes turitus for about eighteen months, and then the specimen faded completely in a few days. Epsom salt in combination has the curious property of keeping the fugitive blues, greens and violets of the wrasses for at least a year, although destructive to the colors of other fishes.

IT will doubtless surprise many to be told that the mastodon is far more common in American museums than is the African elephant. The skeleton of Jumbo in the Am. Mus. Nat. Hist., New York City, is almost the only specimen of this animal in the country, while there are at least ten mounted skeletons of mastodon and teeth and bones without number. It is not too much to say that not a week elapses without some published account of the discovery of mastodon remains and while most of the specimens are poorly preserved, or consist only of individual teeth, yet in the aggregate their number is very considerable. Orange and Ulster counties, N. Y., appear to have been favorite burying places for the mastodon, and from the character of the ground it is evident that many specimens will yet come to light from these localities.

F. A. L.

SCIENTIFIC NOTES AND NEWS.

THE Astronomical and Astrophysical Society of America, which, as we have already stated, was recently established at the third Conference of Astronomers and Astrophysicists held at the