heating nor by shock. On account of its great stability towards oxidising agents, the author suggests the formula $C_6H_5.N \vdots NH$ as being the most probable.

THE additions to the Zoological Society's Gardens during the past week include two Tigers (*Felis tigris*, ♂, ♀) from India, presented by H.H. the Maharani Regent of Mysore; a Black-eared Marmoset (*Hapale jacchus*) from South-east Brazil, presented by Mrs. G. L. Bagnell; a Pine Marten (*Mustela martes*), British, presented by Mr. C. G. Beale; a Common Squirrel (*Sciurus vulgaris*), British, presented by Mr. Cecil Slade; a Yellow-cheeked Amazon (*Chrysotis autumnalis*) from Honduras, presented by Mr. S. Hankings; two Crimson-crowned Weaver Birds (*Euplectes flammiceps*) from West Africa, presented by Mrs. Charles Green; a Sharp-nosed Crocodile (*Crocodilus cataphractus*) from West Africa, presented by Mr. J. A. Robb; a Four-lined Snake (*Coluber quatuorlineatus*), European, presented by Mr. W. R. Temple; four Natterjack Toads (*Bufo calamita*), European, presented by Mr. Stanley S. Flower; two Great Wallaroos (*Macropus robustus*, ♂, ♀) from South Australia, three Wrinkled Terrapins (*Chrysemys scripta rugosa*) from the West Indies, deposited; an Adanson's Sternothere (*Sternothoerus adansoni*), a Common Chamæleon (*Chamaeleon vulgaris*) from the Soudan, received in exchange; a Burrhel Wild Sheep (*Ovis burrhel*), two Black-backed Gulls (*Larus marinus*), a Herring Gull (*Larus argentatus*), bred in the Gardens.

ERRATUM.—We are asked to state that in the report of Prof. S. Young's paper, read before the Physical Society on June 22, on the Law of Cailletet and Mathias, the words "1 per cent." (p. 215, col. 1, line 3) should be "0·1 per cent." The 0 was omitted from the report sent to us.

OUR ASTRONOMICAL COLUMN.

COMET GIACOBINI (1900 *a*).—Several observations have been made of this comet since its conjunction with the sun, but it is reported as faint. The following positions are an abridgment from the Ephemeris by Herr Ristenpart in *Astronomische Nachrichten*, No. 3636.

Ephemeris for 12h. Berlin Mean Time.

1900.	R.A. h. m. s.	Decl. °
July 12 ...	22 29 5 ...	+46 25·9
14 ...	12 29 ...	46 50·9
16 ..	21 55 5 ...	47 5·1
18 ...	37 4 ...	47 7·1
20 ...	18 42 ...	46 55 9
22 ...	21 0 16 ...	46 30·8
24 ...	20 42 2 ...	45 51·8
26 ..	24 19 ...	45 0·0
28 ...	20 7 20 ...	43 56·4
30 ...	19 51 16 ...	+42 42·4

The comet attains its maximum north declination on the 18th, to the north-west of α Cygni, afterwards travelling in a south-westerly direction through Cygnus and Lyra.

WALTER PERCY SLADEN.

BY the death of Walter Percy Sladen, the world has lost one of the most lovable of men, and science an earnest devotee—a worker content to spare no effort could he but discover the truth.

Sladen was born on June 30, 1849, at Meerelough House, near Halifax, Yorkshire, and was educated at Hipperholme Grammar School, and afterwards at Marlborough under Dean Bradley. He came of an old Yorkshire family, who have been much respected for many generations; and ease and refinement of manner were among his marked characteristics, while the charm of his address endeared him to all with whom he came in contact.

He never attended a regular academic course of instruction in the branch of science in which he became eminent; his elementary training was self-acquired, and his leaning towards zoology innate. The definitive choice of the Echinoderma as the object of his life's work was of his own seeking, after much consideration; and in this he showed great force of character and a power of self-reliance which there was reason earlier to believe he possessed, for even before he entered Marlborough he evinced an unusual predisposition towards science, in founding for his boy friends a scientific society devoted more especially to the study of astronomy, in connection with which he became known among them as the "Astronomer Royal." Little did he think that he would in later life become for ten years a secretary of a leading scientific society, and that for eighteen he would conduct the affairs of a zoological research committee, as he did in his capacity as Secretary to the British Association Table of the Naples Station.

Sladen's scientific work, so far as his published memoirs and papers are concerned, extended over a period of seventeen years, 1877 to 1893. Of these there are thirty-four in all—twenty-one from his own hand, thirteen in conjunction with his intimate friend and adviser, the late Prof. Martin Duncan. Beyond these there stand to his record certain bibliographical notices and miscellanea. Of the thirty-four published works, fifteen of which he was sole, and four of which he was joint author, deal with the starfishes; and of the remaining fifteen, nine were conjoint, and devoted, with the exception of two, to fossil forms. Conspicuous among these are reports upon the collections made by the Geological Survey of India; and among those which he alone produced are Parts i. and ii. of the second volume of the Palæontographical Society's Memoirs on the Fossil Echinodermata, which were his last published works. They deal with the Cretaceous Asteroids, and appeared in the Society's volumes for 1890 and 1893. His first three papers deal with the remarkable creature *Astrophiura*, whose generic name is self-explanatory. The first, a brief description, was published in the *Proceedings of the Royal Society* for 1878; the other two, each containing a Latin diagnosis, in the *Zoologischer Anzeiger* and *Annals and Magazine of Natural History*, the year following. His remaining papers appeared in the *Annals* and the *Journal of the Linnean Society*, the publications of the Royal Society of Edinburgh, and elsewhere. They mostly deal with whole collections, and include reports on those made in the Arctic Region in 1875–1876, on those of the *Alert*, *Knight Errant* and *Triton*, as also those made in the Faroe Channel, the Korean Sea, and the Mergui Archipelago. In each Sladen produced good results, as in the discovery of genera such as *Micraster* and *Rhegaster*; and what more natural, therefore, than that he should have been entrusted with the working out of the Asteroids collected by H.M.S. *Challenger*, the report upon which was the crowning achievement of his life.

This magnificent work of 900 pp., with its accompanying atlas of 118 plates, ranks among the most masterly and exhaustive of the *Challenger* volumes. Before taking it seriously in hand, Sladen visited every museum in Europe (with one exception) which was known to contain starfishes of importance; and, as pointed out by the editor in its preface, it is a monograph of the whole group. The labour involved in its production was prodigious; and its interest is enhanced by the fact that the bulk of it was written between the hours of 9 p.m. and those of early morning, often after a day's occupation with other affairs. The extension of the family Pterasteridæ and the great addition to our knowledge of the deep-sea forms are its most salient characters; but we know not which to admire most, the body of the work, with its laborious descriptions of individual forms, or the supplemental part, in which there is given a list of every known species, with a record of its bathymetric distribution. Elementary student and expert stand alike indebted to him for this monumental work, indispensable to progress in the knowledge of the subject with which it deals. Generic names like *Benthaster* and *Marsipaster* are sufficiently significant in themselves. Proceeding to classification, Sladen made good use of the marginal and ambulacral plates, and his subdivision into the sub-classes *Euasteroidea* and *Palaeasteroidea*, with the ordinal divisions to which he was led, has withstood the test of time and become the adopted classification of the better text-books, as for example those of Lang and Gregory. In this his influence on the progress of science will live, and it is a matter of profound gratification that only a short time before his death