March 24, 1881

THE LATE MR. E. R. ALSTON

The death of Edward Richard Alston, which took place at his rooms in Bedford Street on the 7th inst., leaves a vacancy in the thin ranks of the working entomologists of this country that will not be easily filled up. At the time of his death, Mr. Alston was secretary to the Linnean Society, a member of the Council of the Zoological Society, and treasurer to the Zoological Club, and up to within a few years of his death was engaged in active botanical work. Mr. Alston, who died of phthisis at the early age of thirty-five, although somewhat retiring in disposition, was a particularly kind and amiable nature, always most friendly with those with whom he was brought into contact, and ready to help them by advice or assistance. Mr. Alston was of Scotch parentage, and a native of Ayrshire. Being from infancy of delicate constitution he was educated chiefly under private tuition, and did not go to school or college. Understanding these disad-

vantages he was a good scholar and read and wrote, and had an excellent acquaintance with comparative anatomy. Taking only to the pursuit of natural history he became a contributor to the Zoologist and other popular journals, principally upon mammals and birds. Mr. Alston's first important paper was an account of the Bat (Insect) of his journey to Australia, made in 1872, in company with his friend Mr. J. Harvie Brown, in which excellent observations are given on the summer migrants and other feathered inhabitants of that previously little explored district. Shortly afterwards Mr. Alston moved his headquarters to London during the first part of the year, and undertook the compi-

lation of the portion of the Zoological Record relating to mammals, which he carried on in a very painstaking and methodical way for six years (1879-85). A new edition of Bell's British Mammals, which had long been called for, appeared in 1879, although he is only credited with having "assisted" in the work, when, before, his name appeared. From that date also he became a frequent reader of papers at the meetings of the Zoological Society and author of several excellent memoirs in the Proceedings. Amongst these may be called special attention to his revision of the genera of Rodents, published in 1879, as a most successful exhibition of the most difficult points connected with the arrangement of this group of mammals, and to his essay on the Mammals of Asia Minor, collected by Mr. C. G. Dandey (1877 and 1880). Mr. Alston's last and most important work, which he had fortunately just brought to an end before his untimely death, was the "Mammals of Sabah and the Godwins's "Biologia Central-Americana"—a great work on the fauna and flora of Mexico and Central America. The first part of this was published in 1878, the eighth number containing the completion of the mammals in December last. The death of this promising naturalist, when in the full tide of work, must be a subject of universal regret among all lovers of science.

RECENT MATHEMATICO-LOGICAL MEMOIRS

The Roulain reform of logical science is at its beginning to manifest itself and to bear the first fruits of controversy. Thirty years ago Boole's remarkable memoirs were treated as striking just about in-comprehensible exiguis. Even Le Monceau did not know exactly how to regard them, and in his "Syllabus of a Proposed System of Logic" (p. 72) he allows their "mysterious truth." In those works the author has made it manifest that the symbolic language of algebra, formed wholly on notions of number and quantity, is adequate, whereas the common carriers are opposed to any such leading-phrase on the right hand.

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in the autumn of 1878 I was almost fishing in the river and a few miles from its mouth, where the stream was broad, strong, and deep—then just beyond the end of my line I perceived a squall being carried down, but swimming higher out of the water than usual with most insects. Its death by being caught seemed to me, as the opposite bank was a high, perpendicular cliff of Old Red Sandstone, where even a squall rarely landed. However it was caught gallantly on, bending straight across the stream, and finally, after being swept down a hay-flats plunged on the other side, where a burn entered the rock, and forests grew down to the water's edge. This last, where the squall must have maned the river, was now lost and obscure, and it selected a spot, accidentally or otherwise, where the current carried it opposite to an easy landing-place on the right bank. Circum. Derwent. March 18.
true and simple results within the sphere of logic, and give a disciplined notion of logical and mathematical relations between the things they are said to be. So the results of any analysis of logic as a whole, or the Logic of Relativities, result from an Amplification of the Concept of Boole's Calculus of Logic. The Logic of Relativities is a new name for the same kind of logical notation by which the matrix notation of constants and logical connectives is made up of individuals, and the very conception of a class of statements and their relations, or the proof of a proposition, is made explicit. The notion of the calculus of logic is not to be confused with the notion of the calculus of classes, which is a generalization of the calculus of logic. The notion of the calculus of logic is made explicit in the notion of the calculus of classes, and the notion of the calculus of classes is made explicit in the notion of the calculus of logic.

But Mr. MacColl takes a different step; he says he has found the method for calculating $a-b$ instead of $a+b$. In regard to form the method is very simple, in regard to matter it isstudiously imitative, for it is simply De Morgan's method. The simplicity of the notation is not due to the use of the same letters for the same purposes as in the original notation, but to the use of the same letters for the same purposes as in the original notation, and the idea of the notation is not due to the use of the same letters for the same purposes as in the original notation, but to the use of the same letters for the same purposes as in the original notation.

In this case Mr. MacColl makes his terms consist of ab sides, $a+b$, and $b$; and $a+b$ is included under the class of terms, which means that $a+b$ is included under the class of terms, and the idea of the notation is not due to the use of the same letters for the same purposes as in the original notation, but to the use of the same letters for the same purposes as in the original notation.

Mr. MacColl claims indeed considerable advantage for his notation, in the way in which the equations are between his terms, and the way in which the equations are between his terms, and in the way in which the equations are between his terms.

Perhaps it ought to be added that Mr. Boole, both in his Mathematical Analysis of Logic, and in his great book "Laws of Thought," introduces classes so absolutely wrong that they are called "Secondary Propositions" or Hypotheticals, which deal, like Mr. MacColl's assertions, with the truth of other assertions; but nothing emerges from Boole's discussion of secondary propositions except that they obey exactly the same formal laws as primary propositions, and are of course expressed equivalently.

W. STANLEY JEVONS

ILLUSTRATIONS OF NEW OR RARE ANIMALS AND THE LOGICAL SOCIETY'S LIVING COLLECTION.

III.

The animals we now have the privilege of presenting to the North-Eastern Asia—a country which, as it is remarked, has of late years produced a considerable number of new animals—are two which are new to the United States, and also belong to the great group of Ruminants—which is so rich in heading all the animals upon the land, and of which the cultivation of animals principally subsists.

6. The Japanese Geo-Antelope (Capricornus cringis), a species of false antelope, was sent from Japan to the British Museum by Dr. Edward T. Riegg, of the Royal Society. The Japanese Geo-Antelope is a species of the same family as the African antelope, and has been described by Dr. Edward T. Riegg, of the Royal Society. The Japanese Geo-Antelope is a species of the same family as the African antelope, and has been described by Dr. Edward T. Riegg, of the Royal Society.