common thing for them to do so here, and they are frequently drowned in making attempts beyond their strength.

Some years ago I was rowing on Lake George in this State, when I observed one of these little animals in an open place, where from the course he was pursuing he must have swum nearly half a mile. He seemed almost exhausted, and when I held my oar towards him he readily accepted the invitation to come on board, ran up the oar, and then to my surprise ran up my arm and ascended to my shoulder! I do not know whether he simply followed his climbing instincts, or whether he sought an elevated point to get an observation. However this may have been, after a short pause he descended and took his station in the bow of the boat, from which in a few minutes he plunged into the lake and struck out for land. He evidently miscalculated his remaining powers, for he was unequal to the effort, and soon gladly availed himself of a second opportunity of gaining a place of refuge. He now sat quietly while I rowed him towards the land, evidently satisfied that he was in friendly hands, and that his wisest plan was to remain as a passenger. When close to the shore he made a flying-leap and scampered for the trees, doubtless grateful in his little heart for the kindness that had helped him over the critical part of his voyage.

This was near the narrows of the lake, where it is about one mile in width, with groups of islands which shorten the traverses to less than a quarter of a mile. My little friend however had not availed himself of the easier and more circuitous route, but had boldly undertaken a directer course and a longer swim, which, but for the timely rescue, would very likely have been his last aquatic attempt.

FREDERICK HUBBARD

New York, March 10

In connection with a recent letter in NATURE on the squirrel taking to water, the following facts may be of interest:—While camping for two summers recently in the wilderness of northern New York, I was much surprised at frequently seeing squirrels crossing the ponds and lakes of the region. We would sometimes find several of these strange navigators in the course of an afternoon's row. They were seen most abundantly during the early part of July; indeed, later in the season, they were but rarely found. During many summers of camping elsewhere I have never seen them take to the water. It has occurred to me that the explanation of this peculiarity (if it be such) of the squirrels of this locality may be found in the nature of the region visited; for we find there a most intricate water-system, the whole region being dotted with ponds and lakes connected by small streams. The necessity of taking to the water at times has perhaps enabled the squirrels to overcome their aversion to this element, and they have thus become semi-aquatic in their habits. The squirrel to which reference is made is the common "red squirrel," Sciurus Hendsonius.

C. Worcester, Mass., March 8

In the autumn of 1878 I was salmon fishing in the River Spey, a few miles from its mouth, where the stream was broad, strong, and deep—when just beyond the end of my line I perceived a squirrel being carried down, but swimming higher out of the water than is usual with most animals. Its death by drowning seemed inevitable, as the opposite bank was a high, perpendicular cliff of Old Red Sandstone, where even a squirrel could hardly land. However it swam gallantly on, heading straight across the stream, and finally, after being swept down a long distance, emerged on the other side, where a burn intersected the rock, and fir-trees grew down to the water's edge. The left bank, where the squirrel must have entered the river, was low and shelving, and it selected a spot, accidentally or

landing-place on the right bank. March 18

## THE LATE MR. E. R. ALSTON

otherwise, whence the current carried it opposite to an easy

CECIL DUNCOMBE

THE death of Edward Richard Alston, which took place at his rooms in Maddox Street on the 7th inst., leaves a vacancy in the thin ranks of the working naturalists 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 days of his decease was engaged in active zoological work. Mr. Alston, who died of phthisis at the early age of thirty-five, although somewhat retiring in disposition, was of 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. Notwithstanding these disadvantages he was a good scholar and a neat and concise writer, and had an excellent acquaintance with comparative anatomy. Taking early 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 (published in the *Ibis*) of his journey to Archangel, 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 head-quarters to London during the first part of the year, and undertook the compilation of the portion of the Zoological Record relating to mammals, which he carried on in a very painstaking and methodical way for six years (1873-78). A new edition of Bell's British Mammals, which had long been called for, appeared in 1874. Mr. Alston, although he is only credited with having "assisted" in this work, was, we believe, its virtual compiler. 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 we may call special attention to his revision of the genera of Rodentia, published in 1876, as a most successful exposition of the many difficult points connected with the arrangement of this group of mammals, and to his memoirs on the Mammals of Asia Minor, collected by Mr. C. G. Danford (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 Salvin and Godman's "Biologia Centrali-Americana"—a great work on the fauna and flora of Mexico and Central America. The first part of this was published in 1879, 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 Boolian reform of logical science is at las beginning to manifest itself and to bear the first-fruits of controversy. Thirty years ago Boole's remarkable memoirs were treated as striking but almost incomprehensible enigmas. Even De Morgan did not know exactly how to regard them, and in his "Syllabus of a Proposed System of Logic" (p. 72) thus allows their mysterious truth:—"In these works the author has made it manifest that the symbolic language of algebra, framed wholly on notions of number and quantity, is adequate, by what is certainly not an accident, to the representation of all the laws of thought." But time and the efforts of several investigators have cleared up much of the mystery in which Boole wrapped his logical discoveries. The controversies now going on touch rather the precise form to be given to the calculus of logic, than the former question of the new logic against the old orthodox Aristotelian doctrine.

The most elaborate recent contributions to mathematicological science, at least in the English language, are the memoirs of Prof. C. S. Peirce, the distinguished mathematician, now of the Johns Hopkins University, Baltimore. Not to speak of his discussions of logical ques-