

the streams, where they exist, run in different directions. M. Flammarion thinks the westward movement is caused by the direction of sunset, towards which people feel disposed to form their gardens, build their houses, and in that direction most inclined to walk; the evening and not the morning being their usual time of recreation. Is not a more probable explanation to be found in the general dislike of an easterly wind? And, moreover, it has been pointed out that a westerly wind usually causes the greatest fall in the barometer, and thus the eastern portion of a town becomes inundated with the effluvia which arises on such occasions. Another and perhaps more potent cause may be the prevalence in Europe of south-westerly winds during the greater part of the year, whereby the smoke and vitiated air of a town are carried to the north-east more frequently than elsewhere; so that it is notorious the west end of a city is freer from smoke than the east end. Possibly all these causes may combine to produce this curious occidental march of the fashionable quarter.

W. F. BARRETT

#### Etymology of Aphis

WITH regard to the etymology of Aphis, I find the following in Lennis' "Synopsis der Natur-geschichte des Thier-reichs," p. 578:—

"Aphis, Blattlaus, nach Fabricius von ἀφίστημι trennen, abstehen; richtiger vielleicht ἐφύσσα von ἀφίω schöpfen; musste dann aber Aphis heissen."

The second explanation is ingenious; but neither seems to my mind satisfactory.

W. W. SPICER

Itchen Abbas Rectory, Alresford, May 14

#### Phosphorescence in Wood

ONE wet evening last autumn some pieces of phosphorescent wood were brought to me, which had formed part of a dead beech-tree that had been cut down during the day. They shone brightly that evening. The next night they were dark until dipped in water, when the light revived but was much fainter than before. On the third night they seemed to have lost the phosphorescence entirely, for water produced no visible effect on them.

Your correspondent, Mr. W. G. Smith, states that the luminosity of decaying wood is due to the presence of various kinds of fungus, but does not say what is the cause of it either in fungi or glow-worms. There is something so striking in the light unaccompanied by sensible heat, that an unlearned person's curiosity is roused to know whether phosphorescence is akin to burning or not. Where can one learn what is known about it?

C. A. M.

#### Tears and Care of Monkeys for their Dead

WE have heard much of late about the emotions of animals, and might have heard it sooner had Charles Bell's profound work on the "Anatomy and Expression," received due attention. The moral or psychical emotions of the brutes most resembling man in structure are peculiarly interesting, and sufficient observations as to this point on the monkeys seem to be yet wanting. Before I saw a picture of a weeping monkey, by Edwin Landseer, I always thought that this animal could be moved neither to tears nor laughter; and I still think that more observations, by persons most familiar with monkeys, are required on this subject, and hope to elicit them by this note in NATURE. But an affectionate care of brutes for their dead has been considered either very rare or in-existent, though it would seem to have been shown by monkeys. At least, we have evidence to this effect in the "Oriental Memoirs," 4 vols. 4to, London, 1813, by James Forbes, F.R.S., and indeed, very likely, there may be still better observations, with which I am unacquainted, on the subject. Here is an extract thereon from Mr. Forbes's book:—  
"One of a shooting party, under a banyan tree, killed a female monkey and carried it to his tent, which was soon surrounded by forty or fifty of the tribe, who made a great noise and seemed disposed to attack their aggressor. They retreated when he presented his fowling-piece, the dreadful effect of which they had witnessed and appeared perfectly to understand. The head of the troop, however, stood his ground, chattering furiously;

the sportsman, who perhaps felt some little degree of compunction for having killed one of the family, did not like to fire at the creature, and nothing short of firing would suffice to drive him off. At length he came to the door of the tent, and finding threats of no avail, began a lamentable moaning, and by the most expressive gesture seemed to beg for the dead body. It was given him; he took it sorrowfully in his arms, and bore it away to his expecting companions: they who were witnesses of this extraordinary scene, resolved never again to fire at one of the monkey race."

GEORGE GULLIVER

Canterbury, May 24

#### RECENT WORKS ON ECHINODERMS

AMONG the most important of recent works on Echinoderms may be mentioned "The Revision of the Echini," by Alex. Agassiz. Of this work, which will be completed in four parts, Parts 1 and 2 were published early in this year, Part 3 is going through the press and may possibly be published in August next; it will contain the description of species not included in Part 2. Part 4 may be published this year; it will contain a review of the anatomy and classification of the order. This part will not be so well illustrated as the author had intended, for six plates of anatomy, the results of many years' labour, with all Mr. Agassiz's drawings, were lost in the great conflagration of November 9, and it will be impossible to supply their places. The present parts are accompanied by an atlas of forty-nine plates. Part 1 contains, in addition to an introductory chapter, the bibliography of the subject, a chapter on Nomenclature, a Chronological List of Names used from 1554, a Synonymic Index, and a chapter on Geographical Distribution. Part 2 contains Description of the Echini of the Eastern Coast of the United States, together with a report on the deep sea Echini collected in the Straits of Florida, by Count Pourtalès, Assistant United States' Coast Survey in the years 1867—1869.

The synonymic index will be simply invaluable to the investigator of the Echini. He who investigates the life-history of a species must surely know the name of the species he is investigating. It is therefore, even from this point of view, by no means an unimportant task to unravel the complicated and tangled network of synonyms; themselves an evidence of lack of knowledge on the part of many. Agassiz regards—and very correctly so—synonymy as the *History of the Species*, not its natural history. His opportunities for examining the types of those authors who have written on the subject were immense, and he has thoroughly availed himself of them. The great Museums of London, Paris, Copenhagen, Vienna, Stockholm, and elsewhere, were all visited by Agassiz; while the original specimens described by Klein, Gray, Desor, Michelin, and others were most carefully examined, and it must not be forgotten that in addition the Harvard College Museum contains one of the most perfect collections of Echini in the world.

It would serve no useful purpose if in this place we examined in any detail the catalogue of species of Echini given on pp. 88, 203 of this memoir; for convenience of reference the genera and the species in their respective genera are arranged alphabetically, but there is added a list of all known species arranged in their natural order, with the name adopted by Agassiz, the original name and the principal localities.

In treating of the geographical distribution of the Echini, Agassiz remarks that it was a matter of great surprise to him to find how few species, hitherto not noticed, were to be found in the European collections. Everywhere, although from different localities, were found repetitions of species already well known—so that in making a map of the littoral regions, but short stretches of shore were left out as unexplored. Though therefore new species may and will undoubtedly turn up, even in