British ornithologists—Yarrell, Macgillivray, Gould, Meyer, and Morris—describe the eye of the Golden Eagle (the less rare of our two British species, and the one usually referred to by our poets) as *hazel* or *brown*. The eye of the Sea Eagle is described by the same authorities as yellow. I cannot think that so accurate an observer of nature as Shakespeare would call either hazel or yellow eyes *green*. Can Mr. Ingleby cite any authority for such a comparison as "green as is an eagle's eye"? while the keen piercing sight of the bird is as proverbial as the swiftness of its flight. I am well aware that green eyes were held in high estimation by the old poets, especially by those of Spain; Shakespeare, however, does not seem to me to have shared in this predilection, as, setting aside the doubtful play of "The Two Noble Kinsmen," and the passage now in question, he uses the epithet three times only, I think, as applied to the eye, and then always *in malam partem*, viz., "green-eyed jealousy," "Merchant of Venice," Act iii. Sc. 2; "It is the green-eyed monster," "Othello," Act iii. Sc. 3; and in "Midsummer Night's Dream," Act v. Sc. 2, where the "eyes as green as leeks" are met with in conjunction with "lily lips," "cherry nose," and "yellow cowslip cheeks." I cannot think with Mr. Murphy (NATURE, vol. xix. p. 197), that the eyes which the old poets so admired as green were what we call blue; they were more probably *grey*, which often has a shade of green in it—the "eyen grey as glas" of Chaucer's "Prioresse." These green or grey eyes were, I think, usually an attribute of feminine rather than masculine beauty, as in the passage from "The Two Noble Kinsmen," Act v. Sc. 1, where they are mentioned in an address to Diana (not Neptune, as Mr. Ingleby has it). Shakespeare well distinguished between the different colours of eyes—see "Two Gentlemen of Verona," Act iv. Sc. 4, and "Twelfth Night," Act i. Sc. 5, for grey eyes; "As You Like it," Act iii. Sc. 2 for blue eyes; "Romeo and Juliet," Act ii. Sc. 4 for black and grey eyes, and Act iii. Sc. i. of the same play, where hazel eyes are mentioned.

ROBERT BREWIN

Exeter, January 20

Intellect in Brutes

SIR HARRY LUMSDEN allows me to publish the following little incident:—Late last autumn some partridges, which he had tamed and kept about the house, disappeared as usual and became wild. When the excessive cold set in and Aberdeenshire was deep in snow, Sir H. Lumsden was greatly pleased and surprised one morning to find his old friends on the doorstep waiting to be fed. Next morning they appeared with a wild covey of eleven birds, and the tame cock sat on the doorstep and crowed to the wild birds, evidently encouraging them to come and eat the food, which, however, they declined to do till it was put further from the house. Soon after the tame birds appeared with two covies. How did they entice the wild birds except by actual bird talk?

WALTER SEVERN

Feeding a Python

THE attack of a constrictor, at all events in confinement, is very often unsuccessful; but perhaps this may be because the reptile is not hungry. I have often seen the constrictors in the London Zoological Gardens strike several times at birds, pulling out feathers and even getting a firm hold and then releasing their prey, to renew the attack presently either with or without success. When the membrane over the eye is becoming opaque in consequence of the change of skin they frequently fail to hit the prey at all, but still persist until they secure it. I saw one of the large pythons take a rabbit in a way which must be unusual, I think. The rabbit was hopping about near the snake's coils when the reptile suddenly made a loop in its body, and firmly inclosed the victim without touching it at all with the mouth, or even raising its head. The rabbit died there, but the snake paid no attention to it for a quarter of an hour and subsequently swallowed it very leisurely.

ARTHUR NICOLS

THE GRAHAM LECTURE, ON MOLECULAR MOBILITY

THIS lecture, the institution of which was referred to in NATURE, vol. xix. p. 254, was delivered on the 22nd inst., by Mr. W. Chandler Roberts, F.R.S., Chemist of the Mint, before the Philosophical Society of Glasgow, in the hall of the University, where Graham graduated in 1824.

The audience, which was very large, included most of the professors of the University.

Mr. James Mactear, president of the Chemical Section, pointed out that they were doubly fortunate in having secured the services of Mr. Roberts, whose co-operation in his work Graham repeatedly acknowledged in the warmest terms, and in the fact that Mr. James Young, F.R.S., of Kelly, the life-long friend of Graham, had consented to preside on this occasion; he therefore vacated the chair in favour of Mr. Young, who introduced the lecturer.

Mr. Roberts briefly traced the influence of Black and Thomson in turning the attention of Graham to the study of molecular physics, to which he patiently devoted his life. In connection with the law of the diffusion of gases the lecturer claimed that Priestley made in 1799 an observation on the escape of hydrogen from a cracked jar. The subsequent and independent discovery of this phenomenon by Doebereiner in 1823 has hitherto been considered the starting-point of the experimental study of gaseous diffusion to which it undoubtedly attracted Graham's attention. After a brief review of the influence of Eastern and Greek thought on the study of molecular movement, allusion was made to Sir Christopher Wren's model representing the effects of all sorts of impulses that result from the impact of hard globulous bodies, which, according to Dr. Sprat, historian of the Royal Society, he proposed as the principles of all demonstrations in natural philosophy, it being considered "that generation, corruption, and all the vicissitudes of nature are nothing else but the effects arising from the meeting of little bodies, of different figures, magnitudes, and velocities."

Herepath's revival of Bernoulli's view as to the movement of gaseous particles was considered, and Mr. Roberts then described in detail the experiments that enabled Graham to establish the law of the diffusion of gases, and he illustrated experimentally the passages of gases through porous bodies, such as unglazed earthenware and artificial graphite, as well as through a layer of the hard translucent variety of opal known as hydrophane. The mode in which Graham studied the diffusion of the momentum of gases, by observations on viscosity as indicated by rates of flow through capillary tubes, was then described. It was pointed out that his law of diffusion forms the basis of the science of molecular mechanics, and his measurements of the rates of diffusion prove to be the measure of molecular velocities which have been so profoundly investigated mathematically by Clerk-Maxwell, Clausius, and Boltzmann, and experimentally by Loschmidt in developing the dynamical theory of gases. The lecturer then considered the passage of gases through colloid or jelly-like bodies which have no sensible pores, dwelling more especially on the separation of oxygen from air by the transmission of air through a thin film of india-rubber, a circumstance of special interest from a physiological point of view.

The liquefaction of gases formed the subject of one of Graham's earliest papers, in 1826, and it occupied his attention at intervals during his life. He held the view that hydrogen when absorbed by palladium is reduced to the metallic form, a supposition which has received strong confirmation from the success that has attended M. Raoul Pictet's efforts to solidify this gas; and that distinguished physicist stated in a letter to Mr. Roberts that it is probable Graham's indication of the density of solid hydrogen will prove to be nearly correct. Allusion was then made to Graham's opinion that the various kinds of matter now recognised as different elementary substances may possess one and the same ultimate or atomic molecule existing in different conditions of movement, the varying degrees of rapidity of this movement constituting, in fact, the difference between the elementary