

It would be rash to assume that the struggles of parturition have no analogous bearing on the after vigour and welfare of offspring in the mammalia also.

HENRY CECIL.

Bregner, Bournemouth, November 27.

#### Snakes "Playing 'Possum."

IN connection with Dr. L. C. Jones' account last week of the Puffing Adder that feigned death, it may be of interest to note that on several occasions I have observed similar behaviour on the part of the English grass-snake (*Coluber natrix*). On finding escape impossible the animal would roll slightly over, with its mouth open to its widest extent, and its tongue protruded, and remain perfectly limp and flaccid, allowing itself to be stroked, moved, and even carried in the hand with the head and tail dangling down on opposite sides, without showing any signs of animation. So sudden is the change from activity to quiescence, and so admirable the imitation of lifelessness that

#### VOLCANIC STALACTITES.

A CURIOUS formation is described by Mr. E. Goldsmith in the *Proceedings* of the Philadelphia Academy of Natural Sciences (part i. 1894, p. 107). It is well known that the highly heated and very fluid lava in the Kilauea crater at Hawaii, as well as in other craters, is occasionally shot up into the air some thirty feet or more. This lava in its descent through the air becomes very porous. If such a highly porous rock have a space underneath, a fresh deposit of liquid lava will trickle through the porous cooled lava, forming as it solidifies the pendant stalactites shown in the accompanying picture, which illustrates Mr. Goldsmith's paper, and has been kindly sent to us by the Academy. The figure represents the entrance to a volcanic cave, photographed by Profs. Sharp and Libbey. It shows an overhanging roof of porous basalt, from which are sus-

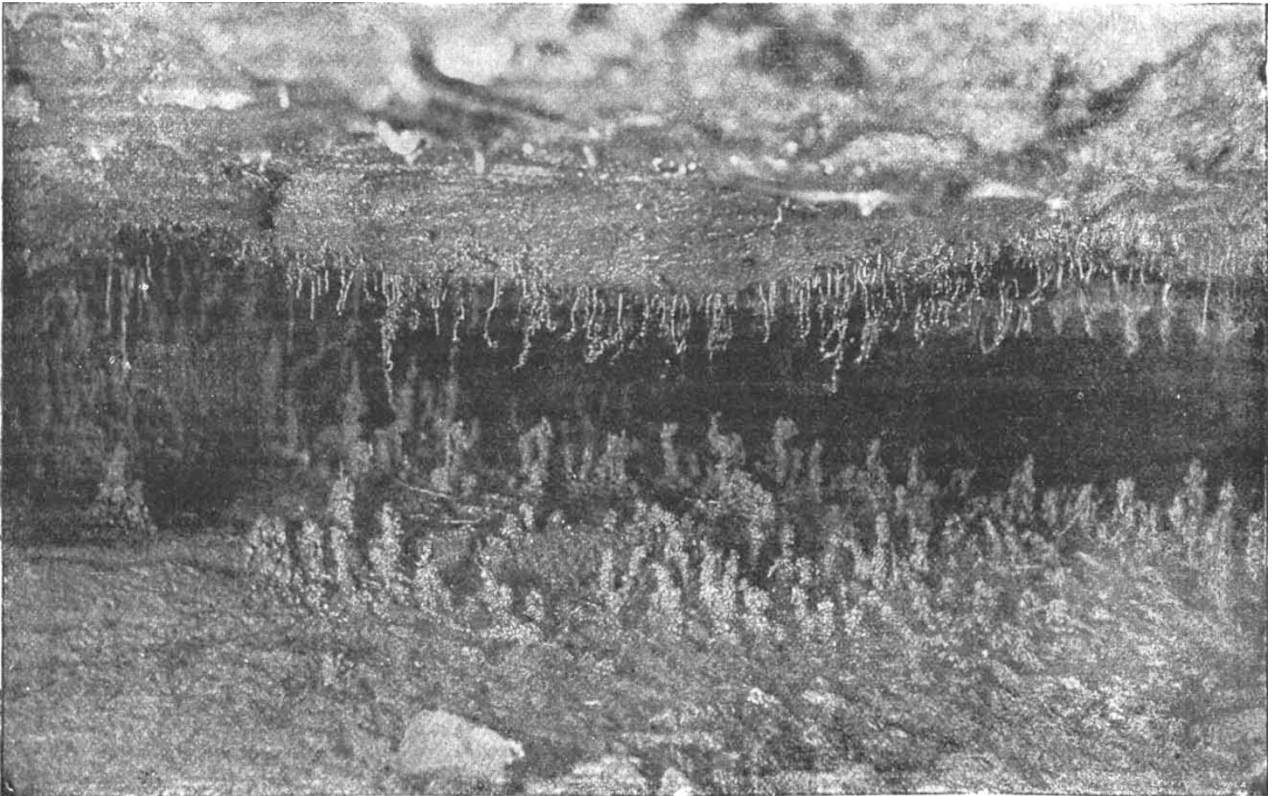


FIG. 1.—Volcanic Stalactites and Stalagmites.

it presents, that on the first occasion on which I witnessed it (now many years ago), I believed the snake to have been seized by some species of fit, and to be at the point of death until, in the faint hope of alleviating its seemingly desperate condition, I plunged it into some cold water, with the happy result of effecting its immediate restoration, the snake possibly thinking its ruse had been successful, and it was once more free. I have known cases, however, in which the symptoms have persisted after the application of the cold-water cure. Subsequently I discovered that no treatment of any kind was necessary, as the snake would "come to" of its own accord after a while.

A point which I should be very interested to learn is whether this condition is produced voluntarily by the animal for protective purposes, "the same with intent to deceive," or is the result of a general nervous inhibition, produced reflexly by the action of fright, which would render it more or less analogous to a fainting-fit.

G. E. HADOW.

pended irregularly gnarled rods of volcanic stalactites; on the floor are scattered fantastic-shaped volcanic stalagmites, which seem to be much thicker than the pendant rods above. Mr. Goldsmith says that the stalactites are about one-fourth of an inch thick, and about eight inches long. They show no disposition to form cones like those seen in limestone caves. They are mostly hollow and porous, and very brittle. The colour is usually a deep black, but sometimes a part is of a brownish tint, due, Mr. Goldsmith thinks, to a higher oxidation of the magnetite present. Fragments of the stalactites, when microscopically examined, exhibited a glassy felspar having apparently the characteristic of sanidine. Magnetite occurred in great profusion, and also gases, probably air. Augite was suspected, but not definitely determined. The specific gravity of a coarse

powder produced from the stalactites was found to be 2.85. The lava is decidedly basic, as the quantity of silica determined analytically was 43.55 per cent. On some of the stalactites a thin layer of colourless crystals were recognised under the microscope. An examination of these incrusting crystals proved them to be selenite.

#### NOTES.

WE are pleased to note that the Court of the Salters' Company have placed at the disposal of the City and Guilds of London Institute a grant of £150 a year, for founding one or more Fellowships for the encouragement of higher research in chemistry in its relation to manufactures. The Fellowships will be awarded by the Executive Committee of the Institute, and the amount of the grant attached to each will be determined by the Committee, with reference to the nature of the research, the time required to complete it, and the merits of the candidate. The Executive Committee will each year apply the sum provided by the Salters' Company to the award of Fellowships to British-born subjects, of a value not exceeding £150 (*a*) to students of the Institute who have completed a full three-years' course of instruction in the chemical department of the Central Technical College, or (*b*) to candidates duly qualified in the methods of chemical research in its relation to manufactures, without restriction as to age or place of previous study. A Fellowship may be renewed for a second and third year, but cannot be held by anyone for more than three years. The holders of the Fellowships will be required to devote their whole time to the prosecution of research, unless otherwise sanctioned by the Executive Committee. The researches will be carried out at the Institute's Central Technical College. Applications for Fellowships should be made in writing addressed to the Honorary Secretary of the Institute, Gresham College, Basinghall Street, London, E.C., and should state the nature of the research proposed to be undertaken, and the qualifications of the candidate. The first award will be made early in the new year.

WE notice with deep regret that Sir Charles T. Newton, K.C.B., the eminent archaeologist, died on November 28.

COMMUNICATION by telephone between Vienna and Berlin has just been opened. The length of the line is 410 miles.

DR. S. NAWASCHIN has been appointed Professor of Botany and Director of the Botanic Garden at the University of Kiev; and Dr. K. Schilbersky Professor of Botany and Vegetable Pathology at the Hungarian Agricultural Institute, Buda-Pesth.

THE editorship of the *Jahrbücher für wissenschaftliche Botanik*, vacant by the death of Dr. Pringsheim, has been accepted by Prof. Pfeffer, of Leipzig, and Prof. Strasburger, of Bonn. All communications should be addressed to the former of these. The *Jahrbücher* have been edited by Dr. Pringsheim since their commencement in 1857, and contain many important contributions to structural and physiological botany.

DR. PHILIP LENARD, who was the late Prof. Hertz's assistant and *privat-docent* at the University of Bonn, has recently been appointed Extraordinary Professor of Physics in the University of Breslau. He has published a number of important investigations on cathode rays, phosphorescence, electrification of water-drops, and kindred subjects.

THE Council of the British Institute of Public Health, realising the great and general interest which is at the present time taken in the question of the anti-toxic serum treatment of diphtheria, have made arrangements for a lecture to be given in the Examination Hall of the Royal Colleges of

Physicians and Surgeons, Victoria Embankment, on Friday, December 7, at 5 p.m. by Dr. G. Sims Woodhead, entitled "The Diagnosis and Anti-toxic Treatment of Diphtheria."

THE second series of lectures given by the Sunday Lecture Society begins on Sunday afternoon, December 9, in St. George's Hall, Langham Place, at 4 p.m., when Mr. E. Neville Rolfe will lecture on "The Buried Cities of Campania." Lectures will be subsequently given by Mr. Wyke Bayliss, Prof. Marshall Ward, F.R.S., Prof. Vivian B. Lewes, Mr. Oswald Brown, Mr. Arthur Clayden, and Mr. Jas. Craven.

THE following lecture arrangements have been made at the Royal Institution: Prof. J. A. Fleming, F.R.S., six lectures (adapted to a juvenile auditory) on the work of an electric current; Prof. Charles Stewart, twelve lectures on the internal framework of plants and animals; Mr. L. Fletcher, F.R.S., three lectures on meteorites; Dr. E. B. Tylor, F.R.S., two lectures on animism; Lord Rayleigh will also deliver six lectures. The Friday evening meetings will commence on January 18, when Prof. Dewar will deliver a discourse on phosphorescence and photographic action at the temperature of boiling liquid air. Succeeding discourses will probably be given by Sir Colin Scott-Moncrieff, Dr. G. Sims Woodhead, Mr. Clinton T. Dent, Prof. A. Schuster, Prof. A. W. Rücker, Prof. Roberts-Austen, Prof. H. E. Armstrong, and Lord Rayleigh, among others.

DR. PATTERSON, in a lecture before the Piscatorial Society, at the Holborn Restaurant this week, entitled "Salmon, Sea-trout, and Trout—What are they?" maintained that they were all varieties of one species, varying according to their environments. On the same evening an exhibition of this year's specimen fish was held by this Society in their museum at the Holborn.

AT a meeting held at the Borough Road Polytechnic, on November 23, a London branch of the Conchological Society of Great Britain and Ireland was formed. It is thought that such a branch, with monthly meetings for discussion, for exhibition, and for exchange, cannot fail to be of advantage. The branch will in no way be a rival of the Malacological Society, but probably a feeder to it. The first ordinary meeting will be held on Thursday, January 10, 1895, at 7 p.m., in a room lent by the Governors of the Borough Road Polytechnic. The attendance of any conchologists in or near London will be welcomed at this meeting.

DURING the past few years the American Museum of Natural History, situated in Central Park, New York City, has grown very considerably. It suffers from the common complaint, however, of not having sufficient funds to devote to the enlargement of the collections, and this in a city where millionaires most do congregate. The report of the operations of the Institution last year shows that the opening of the museum on Sundays is greatly appreciated. Many important additions have been made to the various collections, the most noteworthy accessions being in the department of mammalian palæontology. Although only in the third year of its establishment, the collections in this department already equal in importance those secured by other institutions through many years of effort. The intention is to form a great collection to represent the evolution of the mammals of North America. Thus far the expeditions to the Rocky Mountain region have secured nearly one thousand five hundred specimens. Fifteen perfect skulls have been obtained from the Bridger Basin, Wyoming. The remains of monkeys, horses, tapirs, primitive rhinoceroses and rodents have also been obtained by the explorations under Dr. J. L. Wortman, and many of them are in an excellent state of preservation. The most notable specimen in the collection is a complete