

on the diamonds discovered at Dlaschkowitz in Bohemia, in which it was stated that fragments of the stone have been burnt, for the purpose of demonstrating its identity with diamonds from other localities.—A note from M. Liebreich on the use of strychnine as an antidote for chloral, was presented by M. Wurtz. The physiological action of these two substances was stated to be so antagonistic, that either of them may be employed with more or less effect as an antidote to the other.—M. Duchartre communicated a memoir by M. Prillieux on the formation of small masses of ice in the interior of plants. These masses, which occur in many plants, when exposed to severe frosts, were described by the author as composed of numerous prismatic needles closely applied to each other, and formed in lacunæ between the cells of the living tissues.—M. A. Chatin presented a second note on the causes of the dehiscence of anthers, in which he described the part taken in the production of this phenomenon by the second membrane or mesothecium.—M. F. Lenormant continued his notes on animals known to the ancient Egyptians, with an account of the domestication of some species of antelopes under the old empire, especially the fourth and fifth dynasties.—Of the following communications no particulars are given. A memoir by M. Delaurier on a new general theory of the production of static and dynamic electricity,—an *electro-thermic theory*; a memoir on the pathology and therapeutics of cholera, by M. J. de Zycki of Wilna; a note by M. G. Adeline on the influence of copper as a preservative from cholera; a note by M. Allegret in continuation of his remarks on the geometrical representation of the elliptical function of the first kind with an arbitrary modulus, &c.; a note on the theory of magic squares, by M. Marie; a letter on the formation of ice, and a note on a case of catalepsy from Mr. Jackson Davis.

## NEW ZEALAND

Wellington Philosophical Society, November 13, 1869.—Mr. W. L. Travers, F.L.S., in the chair.

Dr. Hector called attention to two live specimens of the mud fish from Hokitika, *Neechania apoda* of Gunther. The specimens were swimming actively in clear water, and had perfect vision, although their eyes are small, so that the undeveloped state of the eye in the specimen previously received must have been exceptional. The Hon. Mr. Fox remarked that these mud fish were not peculiar to Hokitika. Five years ago he remembered seeing a fish dug up from a gravelly-clay ten feet below the surface at Rangitikei, and he believed that it was identical with the fish exhibited.

A remarkable meteor, observed in Wellington on the 8th inst. at 11.30 P.M., was described by the Rev. Mr. Stock. It was observed in E.S.E. and descended almost vertically with three distinct coruscations, attended by showers of sparks and bright prismatic colours. The brightness was equal to that of Venus. Mr. Kebbell and Mr. Gillon corroborated Mr. Stock's observations. A description of three additions to the New Zealand flora, with specimens, was laid on the table, and Dr. Hector gave a short abstract of a report by Mr. Kirk, of Auckland, on the botany of Cape Colville peninsular. This paper gave the results of a survey that had been made for the Geological Department for the purpose of obtaining an accurate record of the original vegetation, as it was undergoing rapid modification by the gold diggers. Several new species of plants were described, of which specimens were exhibited.

The next paper was a description of the mechanical apparatus employed in raising the *Turanaki*, by Mr. J. T. Stewart. Dr. Hector directed attention to a collection of the marine animals that were found on the vessel, among which are three species of *anomia*, two of *mytilus*, *ostrea*, *pecten*, *serpula*, *balanus*, and *teredo*. He remarked that some of these animals are usually confined to depths only slightly below low water. Their occurring so well-grown within a year at the depth of 100 feet, seemed to indicate that depth of water did not so much control their existence as a supply of nourishment, which was probably abundant near the wreck.

Mr. Skey showed that the temperature obtained by the common blowpipe, with proper precautions against conduction of heat, was at least 5,100° Fahr., as it is capable of fusing fine points of platinum, and described a new process to facilitate the analysis of supposed auriferous quartz, when sulphides were present in large quantities. Iodine or bromine is used as the solvent, and a rapid test is obtained by dipping filter paper in the solution and burning it with due care, when if gold be present a very characteristic purple hue is imparted to the ash. By this test

the presence of gold in the proportion of one dwt. in the ton can be detected with great economy and certainty.

Dr. Hector described the bones of a fossil penguin recently discovered on the west coast of Nelson, and presented to the museum by Mr. Dingan. The discovery is interesting, as a fossil bone found by Mr. Mantell in the Oamaru limestone of Otago in 1849, was pronounced by Prof. Huxley to belong to a gigantic penguin five feet in height. The fossil bones found by Mr. Dingan, appeared to be those of a bird not larger than penguins that still exist in antarctic seas. The fossil shells sent from the same formation as the bones, indicate that they belong to a lower pliocene period.

Mr. Hamilton read a paper on the educational system.

## DIARY

## THURSDAY, MARCH 3.

ROYAL SOCIETY, at 8.30.—Results of Monthly Observations of Dip and Horizontal Force made at Kew Observatory: Dr. Balfour Stewart.—Spectroscopic Observations made with the great Melbourne Telescope, Nebula in Argo, and the Spectrum of Jupiter: A. Le Sueur.  
CHEMICAL SOCIETY, at 8.—Indices of Refraction: Dr. Gladstone.  
LINNEAN SOCIETY, at 8.—Hybridism among Cinchonæ; Mr. J. Broughton.  
PATHOLOGICAL SOCIETY, at 8.  
ROYAL INSTITUTION, at 3.—Chemistry of Vegetable Products: Prof. Odling.  
SOCIETY OF ANTIQUARIES, at 8.30.—Monastic Inventories: Rev. M. S. C. Walcott.

LONDON INSTITUTION, at 7.30.

## FRIDAY, MARCH 4.

GEOLOGISTS' ASSOCIATION, at 8.  
PHILOLOGICAL SOCIETY, at 8.15.  
ROYAL INSTITUTION, at 9.—Iron-built Ships: Mr. E. J. Reed, C.B.  
ARCHÆOLOGICAL INSTITUTE.

## SATURDAY, MARCH 5.

ROYAL INSTITUTION, at 3.—Science of Religion: Prof. Max Müller.

## MONDAY, MARCH 7.

LONDON INSTITUTION, at 4.  
MEDICAL SOCIETY, at 8.  
ENTOMOLOGICAL SOCIETY, at 7.  
SOCIETY OF ARTS, at 8.—Cantor Lecture: Dr. Paul.  
ROYAL INSTITUTION, at 2.—General Monthly Meeting.

## TUESDAY, MARCH 8.

PHOTOGRAPHIC SOCIETY, at 8.  
ETHNOLOGICAL SOCIETY, at 8.—On the opening of a Cairn in North Wales: Col. A. Lane Fox.—On the Earliest Phases of Civilisation: Hodden M. Westropp.  
INSTITUTION OF CIVIL ENGINEERS, at 8.—The San Paulo Railway, Brazil: Mr. D. M. Fox, M. Inst. C.E.  
MEDICAL AND CHIRURGICAL SOCIETY, at 8.30.  
ROYAL INSTITUTION, at 3.—Plant Life: Dr. Masters.

## WEDNESDAY, MARCH 9.

SOCIETY OF ARTS, at 8.—Street Tramways: W. B. Adams.  
ARCHÆOLOGICAL ASSOCIATION, at 8.  
ROYAL MICROSCOPIC SOCIETY, at 8.—1. On the Comparative Steadiness of the Ross and Lister Models under Trying Circumstances; 2. On the Shell Structure of Fusulina; 3. On the Microphyte of the Fish's Ovum; 4. On the Reparation of the Spines of Echini: Dr. W. B. Carpenter.  
GEOLOGICAL SOCIETY, at 8.—On the Structure of a Fern-stem from the Lower Eocene of Harne Bay, and on its allies, recent and fossil: Mr. W. Caruthers, F.L.S., F.G.S.—On the Oolites of Northamptonshire: Mr. Samuel Sharp, F.G.S.—On the Geology of the district of Waipara River, New Zealand: Mr. T. H. C. Hood, F.G.S.

## THURSDAY, MARCH 10.

ROYAL INSTITUTION, at 3.—Chemistry: Prof. Odling.  
ROYAL SOCIETY, at 8.30.  
MATHEMATICAL SOCIETY, at 8.  
ZOOLOGICAL SOCIETY, at 8.30.—On Dinomis: Professor Owen.—Description of a new species of *Ampullaria*: Dr. J. C. Cox.—On the Birds of Veragua: Mr. O. Salvin.—On new birds from the Yantze-kiang: Mr. R. Swinhoe.  
LONDON INSTITUTION, at 7.30.

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