squares of the respective absolute temperatures.-13. Project for preliminary operations in connection with the transit of Venus in 1874, by Dr. G. Neumayer, in which the author discussed at considerable length the measures to be taken in the observation of that important phenomenon.—14. Prof. E. Ludwig noticed an investigation made by himself and Dr. C. Graebe upon some derivatives of naphaline allied to the chinones.—In presenting the fourth part of Dr. Manzoni's "Bryozoi fossili Italiani," the fourth part of Dr. Manzon's "Bryozoi fossili Italiani," Prof. Reuss noticed its contents, which include the descriptions of twenty-four species of fossil *Chilostomatous Bryozoa*, partly from the pliocene of Calabria and Castellarquato and partly from the miocene of Turin, &c. Nine species are described as new. This part also contains a critical examination of all the Italian fossils of this class. The report of the observations made during Tebruary at the Cantral Institution for Mateorology and during February at the Central Institution for Meteorology and Terrestrial Magnetism was communicated.

Imperial Geological Institution, March 16.-M. C. Griesbach, in a letter dated Port Natal, January 3, 1870, relates that he found fossils in the sandstone of the Table mountain. On a journey into the Griqua-land, he discovered also a large series of very well-preserved fossils, which he thinks belong to the Tithonic series.—Baron O. Petrino, On the origin of the Löss. Researches in the territories of the Dniester, the Pruth, and the from the upper part of the mass of water which during inundations overflows the surrounding country ; (2) the time of its formation begins with the end of the glacial period, and has continued up to the present day; (3) within the löss-deposits layers of different periods are, locally, easily to be distinguished. The old river terraces and banks of pebblestone and sand are the product of quicker running rivers, which excavate their bed more rapidly. They are contemporaneous with the löss-deposits.—Dr. Bunzel exhibited a series of fossil bones from the upper chalk formation of Grünbach, near Neunkirchen in Austria. They form one of the most interesting palæontological discoveries which we have met with in the last few years. Dr. Bunzel recognised among them remains from animals of the families of the *Crocodilians*, *Lacer-tilians*, *Dinosaurians*, and *Chelonians*. The *Lacertilians* are especially represented by a new genus very nearly allied to the gigantic *Mossaurus* from Mästricht, which genus has received the name Danubiosaurus. To the Dinosaurians belongs a new species of *Iguanodon*, *I. Suessi* Bunz. A very peculiar type is indicated by a skull of a saurian, in many respects resembling that of a bird, which he has called *Struthiosaurus*.—Charles von Hauer, On the deposit of Potassium-salts at Kalusz (Galicia). They form a layer seventy feet thick. The whole mass contains on an average 15.5 per cent, potassium, and consists of a mixture of the mineral species, kainit, sylvin, and salt. The presence of sulphuric acid renders it more suitable for all industrial purposes than the well-known layer of Stassfurth, Prussia.—D. Stur has shown by an accurate examination of a large series of fossil plants, that the red sandstones of the Banat belong to the Permian (Dyas) formation, and that the coal-measures below it belong to the fifth or form anon (Coinit) of the anthonismus formation the fifth or fern-zone (Geinitz) of the carboniferous formation.

Anthropological Society, March 22.—Prof. Bokitansky in the chair. Prof. Müller on' the origin of the writing of the Malayan peoples. The author argued against the views defended especially by the English ethnologist, Crawfurd, the famous Malayan scholar, that the Malayan alphabets (the writing of the Battak, the Redschang, Lampong, Bugi, Ma-kassar, and Tagulo peoples) are an independent invention. By the form of the single letters, as well as by the manner used to indicate the vowels, he proved that these alphabets originate from the old Indian writing which is to be found in the Buddhistic from the old Indian writing which is to be found in the Buddhistic inscriptions. In connection with this question he spoke also of the origin of the Indian writing generally, and by a com-parison of the old Indian with the Malayan alphabets, he comes to the conclusion that the Indian writing originated from an old Semitic alphabet. He remarked especially on the close relation between the language and the writing, and pointed out the progress which the people made by developing the writing with syllables (Silbenschrift) to a pure sound-writing (Lautschrift). —Franz v. Hauer offered to the society a large series of pre-his-toric archaeological objects found in different parts of the Austro-Hungarian monarchy. Of year high interset among them Hungarian monarchy. Of very high interest among them are stone (Obsidian) implements, recently discovered by H. Wolf in the environs of Tokaj (Hungary). They have been found in many different spots, partly actually on the surface, partly in a particular stratum, covered with a bed eight feet thick of quicksand. The implements are not polished, they are accompanied by fragments of very rude vessels, by bones, and rarely by metal objects. The analysis of one of the latter, made by A. Patera, gave in 100 parts 63'75 silver, 32'5 copper, 2'0 tin, 0'125, gold, and traces of iron. The collection contains further perfectly well preserved rude vessels from Morovan near Pistvan in Hungarv, fragments of similar vessels from Waitzen on Pistyan in Hungary, fragments of similar vessels from Waitzen on the Danube, many objects from Olmütz, &c., Von Hauer remarked besides that all the remainder belong to the alluvial period, and that we have hitherto possessed very few indications of the existence of man in the diluvial (postplicene) period in Austria. Count T. Wilczek dedicated to the society a sum of 2,000 for. (200 l. sterl.) for excavations in the celebrated sepulchral field of Hallstatt, and for an exploration of the lakes of Upper Austria for pile-buildings.

DIARY

THURSDAY, APRIL 21.

LINNEAN SOCIETY, at 8 .- On the Vertebrate Skeleton: Mr. St. George J. Miyart.

CHEMICAL SOCIETY, at 8. NUMISMATIC SOCIETY, at 7.

FRIDAY, APRIL 22.

QUEKETT MICROSCOPICAL SOCIETY, at 8.

MONDAY, APRIL 25.

ROYAL GEOGRAPHICAL SOCIETY, at 8.30. LONDON INSTITUTION. at 4.

TUESDAY, APRIL 26.

ROYAL INSTITUTION, at 3 .- On Moral Philosophy : Prof. Blackie.

ETHNOLOGICAL SOCIETY, at 8 .- On the Philosophy of Religion among the Lower Races of Mankind : Mr. E. B. Tylor .-- On the Brain in the Study of Ethnology: Dr. Donavon.

SOCIETY OF ANTIQUARIES, at 2 - Anniversary Meeting.

WEDNESDAY, APRIL 27.

SOCIETY OF ARTS, at 8. GEOLOGICAL SOCIETY, at 8.

THURSDAY, APRIL 28.

ROYAL INSTITUTION, at 3.-Electricity : Prof. Tyndall. ROYAL SOCIETY, at 8.30. ZOOLOGICAL SOCIETY, at 8.30.

CONTENTS

PAGE

ON ORIGINAL EXPERIMENTAL RESEARCH IN RELATION TO EMPLOY-MENT FOR WORKMEN. By GEORGE GORE, F.R.S. 623 LETTERS TO THE EDITOR :--Evidence concerning Heterogeny .- GILBERT W. CHILD 626 Prismatic Ice-Sandstone Boulder in Granite.-WM. PENGELLY, Science and the University of Cambridge.-Rev. T. G. BONNEY . 628 EXPLORATION OF CAVES AT SETTLE, YORKSHIRE. By W. BOYD THE ABRADING AND TRANSPORTING POWER OF WATER. 1.-Mechanical Properties of Water. By T. Login. 629 The Stone Age in Egypt. By J. Evans, F.R.S 631 THE PROJECTED CHANNEL RAILWAYS, III. (With an Illustration.) 631 SCIENTIFIC SERIALS