

elicited some observations from M. Chevreul, who read afterwards on his own account a short report on a small pamphlet written by him during the investment of Paris. The title of this *brochure* is somewhat long, and explains clearly the meaning of the work: "On a fault of reasoning which is committed very often by people engaged in natural philosophy when reasoning on the concrete. The explanations are drawn from the last writings of M. Chevreul." These writings are mostly communications presented by M. Chevreul to the Academy for the last three years, when he was strenuously advocating a new classification of sciences as well as of the different objects of nature.—M. Trécul read some interesting observations on the Vegetation of Ferns.—M. Sant Venant, a member of the Section of Mechanics, presented a paper written by M. Boussinerg, a promising young French mathematician, who does not belong to the Academy. The paper related to the observations of an immense number of transcendental equations which present themselves to the mathematical inquirer when studying physical phenomena.

April 24.—The account of this sitting was published in the last number of NATURE. We have nothing of importance to add to it. All the *Comptes Rendus* of the period are signed by M. Elie de Beaumont, acting as perpetual secretary. M. Elie de Beaumont was formerly a senator, although it can hardly be said he has ever meddled with politics. M. Delaunay, the present director of the National Observatory, has inaugurated the regular publishing of a monthly abstract of meteorological observation. It is a practice which is revived from Arago's, but was stopped by M. Leverrier when he stepped into office in 1854.

BERLIN

Royal Prussian Academy of Sciences, March 6.—M. Roth read the continuation of his historical remarks upon the theory of metamorphism, and the production of crystalline slates.—Prof. A. W. Hofmann read papers on phosphuretted hydrogen, and on the direct substitution of the alcoholic radicals for the hydrogen in that compound.

March 9.—M. Riess read a paper on the action of the subsidiary currents of the electrical battery upon the main current and upon each other.

March 30.—Prof. Hofmann described an eudiometer with movable wires. The apparatus consists of a glass tube, with two short narrow tubes attached to it at right-angles, and opening into it opposite to each other; these are closed by steel caps, through which steel screws pass, bearing the platinum wires. The screws are furnished with loops for the attachment of wires.—Prof. Hofmann also read a memoir on isodicyanic æthers, compounds which occupy a middle place between the cyanic and cyanuric æthers; and another on biuret and allied compounds.—Prof. Dove read a paper on the behaviour of agate in the magnetic field.

VIENNA

I. R. Geological Institution, April 18.—Prof. Peters, of Gratz, sent a communication about a newly discovered mineral spring at Hengsberg, near Gratz. Besides a large quantity of free carbonic acid and carbonate of lime, the water contains chlorine, bromine, traces of iodine, boracic acid, and among the alcalies a considerable quantity of lithium.—M. J. Paner related a remarkable phenomenon which has occurred during recent years in the large lake of Neusiedel, near Oldenburg, in Hungary. This lake, which measured nearly six German (about 150 English) square miles, was entirely dried up in the year 1865, and the ground was gradually converted into arable land. During the last winter, however, the water regained its territory, and to the great damage of the cultivators the basin is again filled up nearly to the same extent which it occupied formerly. Documents were found which prove that similar events took place in former centuries, and on one spot were discovered trunks of trees rooting in the ground as much as three feet in diameter. They prove that at a former period the lake was dry through a long series of years.—M. E. v. Mojrivosics presented a memoir on the so-called alveolar Orthoceratites from the Triassic and Liassic deposits of the Alps. He proved that they all are the phragmocones of a particular genus of the family of the Belemnitidae, and that their isolated rostra are the forms which Gumbel called *Attractites*. The genus was described many years ago by Fr. v. Hauer and named *Aulacoceras*, but he had united it with the

family of the Orthoceratidae. To *Aulacoceras* belong all formerly so-called *Orthoceratites* with a marginal siphon, from the mesozoic formations of the Alps, and only the species with a central siphon are real *Orthoceratites*.

BOOKS RECEIVED

ENGLISH.—Discourses on Practical Physic: Dr. B. W. Richardson (Churchill).—The Coming Race (Blackwood and Sons).

FOREIGN.—(Through Williams and Norgate)—Vorwort zu der Physik der Erde: Dr. R. Reuschle.—Grundzüge der technischen Naturlehre: Dr. Ph. Huber.—Lehrbuch der Physik und Mechanik: Dr. L. Blum.—Lehrbuch der Physik: Dr. W. Eisenlohr.—Anatomie und systematische Beschreibung der Alcyonarien: Dr. A. Kölliker.

DIARY

THURSDAY, MAY 18.

SOCIETY OF ANTIQUARIES, at 8.30.—Exhibition of Stone Implements (Palæolithic), with Papers by A. W. Franks, V.P., and J. Evans, F.R.S.
CHEMICAL SOCIETY, at 8.—On a New Double Salt of Thallium: R. J. Friswell.—On a New Benzolic Derivative: Dr. Armstrong.
ROYAL INSTITUTION, at 3.—On Sound: Prof. Tyndall, F.R.S.

FRIDAY, MAY 19.

ROYAL INSTITUTION, at 9.—On Bishop Berkeley and the Metaphysics of Sensation: Prof. Huxley, F.R.S.
ROYAL UNITED SERVICE INSTITUTION, at 3.—The Winds of the North Atlantic: Captain H. Toynebee, F.R.A.S.

SATURDAY, MAY 20.

ROYAL SCHOOL OF MINES, at 8.—Geology: Dr. Cobbold.
ROYAL INSTITUTION, at 3.—On the Instruments Used in Modern Astronomy: J. N. Lockyer, F.R.S.

MONDAY, MAY 22.

ROYAL GEOGRAPHICAL SOCIETY, at 1.—Anniversary Meeting.

TUESDAY, MAY 23.

ROYAL INSTITUTION, at 3.—On the Principle of Least Action in Nature: Rev. Prof. Haughton.

WEDNESDAY, MAY 24.

GEOLOGICAL SOCIETY, at 8.—Geological Observations on British Guiana: J. G. Lawkins, F.G.S.—On the Principal Features of the Stratigraphical Distribution of the British Fossil Lamellibranchiata: J. Logan Lobley, F.G.S.
LINNEAN SOCIETY, at 3.—Anniversary Meeting.

THURSDAY, MAY 25.

ROYAL SOCIETY, at 8.30.
SOCIETY OF ANTIQUARIES, at 8.30.
ROYAL INSTITUTION, at 3.—On Sound: Prof. Tyndall, F.R.S.

CONTENTS

	PAGE
THE PEOPLE'S UNIVERSITY. By Prof. H. E. ROSCOE, F.R.S.	41
THE SUN. By Prof. S. NEWCOMB	41
FOREIGN SCIENTIFIC ASSOCIATIONS	43
OUR BOOK SHELF. (<i>With Illustration.</i>)	44
LETTERS TO THE EDITOR:—	
Thickness of the Earth's Crust.—A. H. GREEN	45
Pangenesis: Graft-Hybrids.—R. MELDOLA F.C.S.; ALFRED W. BENNETT, F.L.S.	46
The Rev. Mr. Highton and Thermodynamics	46
On the Radial Appearance of the Corona.—Prof. OSBORNE REYNOLDS	46
A few more Words on Daylight Auroras.—J. JEREMIAH	47
The Conservation of Force.—N. A. NICHOLSON	47
THE BIG GUN OF WOOLWICH	48
A NEW INEXTINGUISHABLE STORM AND DANGER SIGNAL LIGHT	49
FRESHWATER BATHYBIUS	49
NOTES	50
REPORT ON THE DESERT OF THE TIB. BY CHAS. F. TYRWHITT-DRAKE	52
AMERICAN NOTES	56
SCIENTIFIC SERIALS	56
SOCIETIES AND ACADEMIES	57
BOOKS RECEIVED	60
DIARY	60