

be wanting in other salt-deposits. The author notices the minerals sylvine, and kainite, which occur scattered in this upper stage at Stassfurt, and mentions their occurrence in the salt-deposit at Kalusy, in Galicia, and partially at Hallstadt, as indications of the upper stages. He also notices the crystalline forms of the kainite and sylvine of Kalusy, and of the kieserite of Hallstadt.—Prof. L. Ditscheiner presented a memoir on some new Talbotian phenomena of interference, describing the phenomena manifested in the spectrum when the object-glass of the telescope is half-covered with crystalline plates of various thickness, whilst two Nicol's prisms are placed before the fissure and before the eye-glass.—The same gentleman also communicated a paper on a simple apparatus for the production of complementary pairs of colours with Brücke's schistoscope, and a notice supplementary to his determinations of wave-lengths, published some years ago.—M. Franz presented a memoir on the theory of simultaneous substitutions in double and triple integrals; and M. Oskar Simony noticed three mathematical problems, one belonging to the integral calculus and the two others to algebraic analysis.—Prof. A. Bauer presented a memoir on some compounds of lead with other metals, in which he showed that lead combines both with palladium and with mercury to form definite chemical compounds, having the formulæ Pd^3Pb and Hg^3Pb^2 . The same gentleman communicated a paper by M. J. Stingl, an analysis of rocks and spring deposits of the Teplitz thermal district.

PARIS

Académie des Sciences, Morales et Politiques, April 29.—The French Institute is divided into five branches, of which the Académie des Sciences is considered the senior. All the branches meet in the same hall on different days of the week; the meetings of the Académie des Sciences take place on the Monday, and those of the Académie des Sciences Morales on the Saturday; the other sittings are not public, and the three other sections do not issue a special periodical, although they keep regular records. The Académie des Sciences Morales was not less determined than its elder brother to maintain its sittings, and they were not interrupted up to April 29. But the number of the members, which had been five for the sittings of the 15th and the 22nd, had diminished again to only three, which is the smallest for making a quorum. The presidency was given to M. Naudet, the senior member by age, who is close to his 88th year. The Académie des Sciences Morales et Politiques, which had been suppressed by Napoleon I. as being tainted with "ideology," was restored by Louis Philippe after the revolution of 1830, and M. Naudet is one of the original members, and was during many years perpetual secretary, resigning five years ago as being unable to fulfil the duties of his post. M. Leveque, one of the younger members, acted as perpetual secretary, and read over a short account of the proceedings of the last sitting. M. Pellat, the only third member present, sat on the benches, and held up his hand to approve the record. Then the reading of memoirs was proceeded with. A member of the Académie des Beaux Arts, whose name is not given to us, availed himself of the privilege granted to the academicians of every section, and took his seat by his colleague Pellat. The general public was represented by three persons. One of them was M. Mangin, a literary gentleman attached for years to the editorial staff of the *Patrie*. The *Journal Officiel* of the Commune took no notice of the proceedings, which were reported in the *Versailles Officiel*. It is very likely that the Académie des Sciences Morales et Politiques will be extinguished for the time by the Communist rule, and there is only a faint hope that the Académie des Sciences itself will be able to find the three members required for a quorum. But some academicians propose to advise the five academies to hold a general sitting every week, so that the chance may be increased.

BOOKS RECEIVED

ENGLISH.—The Sub-Tropical Garden: W. Robinson (Murray).—Horses: their National Treatment, &c., by Amateur (Ballière, Tindall, and Cox).—The Builders of Babel: D. McCausland (R. Bentley).—The Meteoric Theory of Saturn's Rings: A. M. Davies (Longmans).—The Physiological Anatomy and Physiology of Man, vol. i. pt. 2: Todd, Bowman, and Beale (Longmans).

PAMPHLETS RECEIVED

ENGLISH.—Report of the Observing Astronomical Society, Bristol.—Brown on the Throne.—Biology *v.* Theology, No. 2, by Julian.—Transactions of the Society of Engineers of Scotland.—Memoirs of the Geological Survey of Ireland, Nos. 104, 113, by G. H. Kinahan.—Report of the Rugby School

Natural History Society for 1870.—First Annual Report of the Natural History Society of Derry.—A First Catechism of Botany, by John Gibbs.—On the Physics of Arctic Ice, by R. Brown.—Descriptions of some New Oaks, by R. Brown.—On Double Spectra, by W. M. Watts.—Proceedings of the Bath Natural History Field Club, vol. ii., No. 2.—The Gold Fields of Nova Scotia, by A. Heatherington.—Report of the Palestine Exploration Fund.—Science and Revelation, by R. P. Smith.—Materialistic Theories, by the Archbishop of York.—Transactions of the Clifton College Scientific Society.—Address delivered at the Anniversary Meeting of the Geological Society, by J. Prestwich.—On the Physiology and Pathology of the Lower Animals, by Dr. Lauder Lindsay.—The Historical Difficulties of the Old and New Testament, by Rev. G. Rawlinson.—Positivism: a Lecture by Rev. W. Jackson.—Transactions of the Scottish Arboricultural Society for 1870.

AMERICAN AND COLONIAL.—Third Annual Report of the Noxious and Beneficial Insects of the State of Missouri, by C. V. Riley.—Report of the Fruit-Growers' Association of Ontario.—On the Solar Corona, by Prof. C. A. Young.—On a Method of Fixing Photography, and Exhibiting the Magnetic Spectra, by Dr. A. M. Mayer.

FOREIGN.—Plaidoyer en faveur de Paris: W. de Fonvielle.

DIARY

THURSDAY, MAY 25.

ROYAL SOCIETY, at 8.30.—On the Temperature of the Earth as Indicated by Observations made during the Construction of the great Tunnel through the Alps: D. T. Ansted, F.R.S.—Some Remarks on the Mechanism of Respiration: F. Le Gros Clark.—On a New Instrument for Recording Minute Variations of Atmospheric Pressure: W. Whitehouse.—Note on the Spectrum of Uranus, and of Comet I., 1871: W. Huggins, F.R.S. SOCIETY OF ANTIQUARIES, at 8.30.—Ballot for the Election of Fellows. ROYAL INSTITUTION, at 3.—On Sound: Prof. Tyndall, F.R.S.

FRIDAY, MAY 26.

QUEKETT MICROSCOPICAL CLUB, at 8. ROYAL INSTITUTION, at 9.—On Bishop Berkeley and the Metaphysics of Sensation: Prof. Huxley, F.R.S.

SATURDAY, MAY 27.

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 29.

ANTHROPOLOGICAL INSTITUTE, at 8.—On the Quissama Tribe of Angola: F. G. H. Price.—On the Races of Patagonia: Capt. Musters.—On Chinese Burials: Dr. Eatwell.

TUESDAY, MAY 30.

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

WEDNESDAY, MAY 31.

SOCIETY OF ARTS, at 8.—On the Employment of Women: Mrs. Grey.

THURSDAY, JUNE 1.

LINNEAN SOCIETY, at 3. CHEMICAL SOCIETY, at 8.—On Ozone: Dr. Debus, F.R.S. ROYAL INSTITUTION, at 3.—On Sound: Prof. Tyndall, F.R.S.

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ERRATA.—Vol. iv. p. 40, in Table of Contents, for "Lieut. S. P. Oliver, R.N." read "Lieut. S. P. Oliver, R.A."; p. 45, 2nd column, line 16, for "slow enough to exceed" read "slow enough not to exceed"; p. 47, 1st column, line 28, for "December 29" read "December 15"; same column, 2nd line of footnotes, for "1871" read "1870."