Missouri," by Dr. A. Schmidt; "On the Terebratula mormonii," by Jules Marcou; "On Climatic Changes in Illinois—its Causes," by A. Sawyer.

Annali di Chimica applicata alla Medicina, July.-The more important papers in this part are :—On some preparations from Eucalyptus globulus and E. amygdalinus, by G. Righini.—On soluble phosphate of lime, or hydrochloro-phosphate of lime, by G. Tarantino.—On a glycerine solution of salicylic acid, by Prof. S. Zinno.—On the hydrate of croton-chloral, by Dr. Weill.—On the aqueous solution of nitrous oxide, by Prof. Ritter.—On veratrine, by Lepage.—On the ozonisation of the air in unhealthy rooms, by Dr. Leuder.—On a green colour free from poison, by Prof. Casali.—On the function of wine in nutrition, by Bouchardat. —On diphtheria, by Dr. G. Tamborlini.—On a remedy against hydrophobia, by Jitzki.—On the reactions of cod-liver oil, by Buchheim.—On mineral waters in their relation to chronic diseases, by Durand Fardel.

SOCIETIES AND ACADEMIES

VIENNA

Imperial Academy of Sciences, June 10.—On some mechanical effects of the electric spark, by E. Mach. - On the different solubility of different planes of the same crystal, and the connection of this phenomenon with some general principles of science, by Prof. Pfaundler.—On the boiling points of chloride of calcium solutions of different concentration, by the same.—On the latent melting heat of sulphuric bihydrate, by the same. -On the Pyrrhulina species of the Amazon River, and on a new Bryconops species, by Dr. F. Steindachner. - On the pretended dependence of the wave-lengths from the intensity of light, by Prof. F. Lippich.—Determination of the orbit of planet (100) Hecate, by Dr. J. E. Stark.—On the theory of the functions of three variables, by Prof. M. Allé.—On a new remedy against Phylloxera (ethylsulphocarbonate of potash), by Dr. Ph. Zoeller and Dr. E. A. Grete.—Dr. L. Löwy recommends salicylic acid for the same purpose.—I'urther researches on the molecular theory, by Dr. A. Handl.—On the determination of the mechanical equivalent of heat, by J. Puluj.

June 17 .- Ichthyological researches, by Dr. Steindachner.-On some determined integrals, by Prof. L. Gegenbaur.-On the earthquake observed on June 12 in the vicinity of Vienna, by Prof. E. Suess.—On the conducting of heat by gases, by Prof. Stefan.—Meteorological observations made at Hohe Warte,

near Vienna.

June 24.—On the determination of nitrogen in albuminates, by Dr. L. Liebermann.—On the quantities of nitrogen and albumen present in human and in cows' milk, by the same. -On the origin of the acacia gum, by Dr. J. Möller.—On alluvial territories, by Dr. A. Boué.—On a new method to use Böttger's sugar test, by Prof. Briicke.—On the action of chlorine upon solutions of sodic citraconate and sodic mesaconate, by Th. Morawski.—On the tannic acids of the oak, by Dr. J. Oser.—On the manner in which guano is formed, by A. Habel.

July 8 .- On a new form of Fresnel-Arago's interference experiments with polarised light, by E. Mach and W. Rosicky.—On acoustic attraction and repulsion, by Dr. V. Dvorak.—On the elastic after-effects from torsion of steel wires, by Dr. J. Finger.—Some experiments on the magnetic effects of rotating conductors, by Dr. J. Odstrcil.—On the conversion of acids of the series $C_nH_{2n}-2$, O_2 into such of the series $C_nH_{2n}O_2$, by Dr. G. Goldschmidt.—Theoretical kinematics, by F. Reuleaux.—On the influence of pressure and draught on the thermal coefficients of the expension of hodies and on the relative behaviour of of the expansion of bodies, and on the relative behaviour of water and caoutchouc, by C. Puschl.—On gentisine, by Herr Hlasiwetz and Dr. Habermann.—On glutaminic acid, by Dr. Habermann.-On the structure of the spinal ganglia, by Herr Holl.—On the Adriatic Annelida, by Dr. E. von Marenzeller. Researches on artificial misformations in hens' eggs, by Dr.

PARIS

Academy of Sciences, Aug. 16.—M. Fremy in the chair.—The following papers were read:—Meridian observations of the minor planets, made at Greenwich Observatory (transmitted by the Astronomer Royal) and at Parls Observatory during the second trimester of the year 1875, communicated by M. Leverrier; the planets observed were Nos. 7, 25, 8, 82, 93, 53, 54, 108, 55, 23, 110, 72, 62, 68, 74, 128, 113, 26, 45, 29, 88, and 64.—Remarks by M. Leverrier on the lately discovered

planets 144 and 145.—On the structure of the ovum and of the seed of Cycadeæ, as compared with that of different fossil grains of coal deposits, by M. Ad. Brogniart. - Some remarks by M. Chevreul on a historical note relating to J. B. van Helmont, àpropos of the definition and of the theory of a flame by M. Melsens.—Ninth note on the electric conductibility of bodies Meisens.—Minth note on the electric conductionity of bodies which are only moderate conductors, and on the electric polarisation of minerals, by Th. du Moncel.—A note by M. F. Tisserand, on the observations of shooting stars on Aug. 9th, 10th, and 11th last.—On the reducing action of hydriodic acid at low temperatures upon ethers proper and on mixed ethers, by R. D. Silva.—Synthetical researches on the uric group, by M. E. Grimaux (second paper).—A note by M. Corpu, or the presence of Phyllogera galls spontaneously. Cornu, on the presence of Phylloxera galls, spontaneously developed on European vines.—M. Vinot then presented an instrument to the Academy, which he calls sideroscope and, which enables any person, however ignorant of astronomy, to find easily all constellations and the principal stars.-Note on a new method of giving proper signals at sea, by M. Trève.—
On the action of copper and its derivatives on the animal organism, by MM. Ducom and Burg.—On an acid obtained from wine, which turns the plane of polarisation to the right, by M. Maumené.—Analysis of the gases given off by the soil on the island of St. Paul, by Ch. Velain.—On Blaen's globes, and on a discovery made by the same in 1600, of a variable star in the constellation of Cygnus, by M. Baudet.—Fourth on tempered glass, by M.M. V. de Luynes and Ch. Feil.—On some double metallic sulphocarbonates, by M. A. Mermet.—On a proper reaction by which to recognise sulphocarbonates in solution, by the same. - On the active part in the seeds of pumpkins as employed as a remedy against tape-worms, by M. E. Heckel.—On the post-tertiary fauna of the caves of Baoussé Roussé in Italy, commonly called grottoes of Mentone, by M. E. Rivière.

BOOKS AND PAMPHLETS RECEIVED

BRITISH.—A Vachting Cruise in the South Seas: C. F. Wood (H. S. King and Co.)—Transactions of the Watford Natural History Society, Vol. i. Part I.—Rotomahana, and the Boiling Springs of New Zealand, by D. I. Mundy and Ferd. von Hochstetter (Low and Marston).—Journal of the Anthropological Institute, Vol. iv. Part 2: Vol. v. Part I.—Snicland, or Iceland; its Jokuils and Fjalls: W. L. Watts (Longmans).—Protection of Life and Property from Lightning: W. McGregor (Beaford, Robinson).—Game Preserves and Bird Preservers: G. F. Morant (Longmans).—Geology: James Geikie (Chambers)—Magnetism and Electricity: John Cook (Chambers).—Chemistry: A. Crum-Brown (Chambers)—Astronomy: A. Findlater. (Chambers).—On the Relation between Diabetes and Food: Dr. Donkin (Smith, Elder and Co.)—Impressions of Madeira: Wm. Longman (Longmans)—Light as a Motive Power: Lieut. R. H. Amet, Vol. i. (Trübner).—Rambles in Search of Shells: J. E. Harting (Van Voorst).—Syllabus of Plane Geometry (Macmillan and Co.)—Instructions in the Use of Meteorological Instruments: Root. H. Scott, M.A., F.R.S., Official).—Quarterly Weather Report of the Meteorological Office, Part 4, 1873 (Official).—Second Report on the Sanitary Condition of Oxfordshire: G. W. Child (Longmans). (Longmans).

	PAGE
SCIENTIFIC WORTHIES, VI.—SIR CHARLES LYELL. By Prof. Arcii.	
GEIKIE, F R.S. (With Steel Engraving)	325
GEIKIE, F.R.S. (With Steel Engraving)	327
HIS ON MORPHOLOGICAL CAUSATION. By M. F	328
OUR BOOK SHELF:-	5
"Bristol and its Environs"	328
LETTERS TO THE EDITOR:	320
"Climate and Time."—JAMES CROLL	329
A Lunar Rainbow, or an Intra-lunar convergence of Streams of	3-7
A Lunar Rambow, or an infla-radial convergence of Streams of	
slightly illuminated Cosmic Dust?—J. W. N. LEFROY	329
"Insunct" and "Reason."—JAMES HUTCHINGS	330
OUR ASTRONOMICAL COLUMN:-	
Double Stars	330
M. Leverrier's Theory and Tables of Saturn	331
The Great Comet of 1819	331
SCIRNCE IN GERMANY	331
ZOOLOGICAL STATIONS ABROAD. By Dr. MIKLUHO-MACLAY	332
THE VATNA JÖKULL, ICELAND.—W.L. WATTS	333
ON AN IMPROVED OFFICAL ARRANGEMENT FOR AZIMUTHAL CON-	555
DENSING APPARATUS FOR LIGHTHOUSES. By THOMAS STEVENSON,	
F.R.S.E. (With Illustration)	333
THE BRITISH ASSOCIATION	
Inaugural Address by the President	336
Section A.—Opening Address	346
Section C.—Opening Address	
Section C.—Opening Address	350
THE FRENCH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE	358
Notes	358
Scientific Serials	359
SOCIETIES AND ACADEMIES	360
BOOKS AND PAMPHLETS RECEIVED	360