

NUMBER CXXIII.

	Page
ART. XX.—Phosphorograph of a Solar Spectrum; by J. W. DRAPER,	171
XXI.—Structure and affinities of <i>Euphoberia</i> of Meek and Worthen; by S. H. SCUDDER,	182
XXII.—The Actinic Balance; by S. P. LANGLEY,	187
XXIII.—Recent American Earthquakes; by C. G. ROCKWOOD,	198
XXIV.—Liquid Carbon dioxide in Smoky Quartz; by G. W. HAWES,	203
XXV.—Gaseous Substances contained in the Smoky Quartz of Branchville, Conn.; by A. W. WRIGHT,	209
XXVI.—Origin of new points in the topography of North Carolina; by W. C. KERR,	216
XXVII.—Occurrence of Realgar and Orpiment in Utah Territory; by W. P. BLAKE,	219
XXVIII.—On the solubility of Chloride of Silver in Water; by J. P. COOKE,	220
XXIX.—Papers on Thermometry from the Winchester Observatory of Yale College; by L. WALDO,	226
XXX.—Determination of the Coefficient of Expansion of a Diffraction grating by means of the Spectrum; T. C. MENDENHALL,	230

SCIENTIFIC INTELLIGENCE.

Chemistry and Physics.—Density of Iodine Vapor, CRAFTS and MEIER, 222.—Researches upon Ozone, HAUTEFEUILLE and CHAPPINE, 233.—Chlor-hyponitric acid of Gay Lussac, GOLDSCHMIDT, 234.—Mercuric Fulminate and its Decomposition, BERTHELOT and VIEILLE, 235.—Direct production of Chloroform and Bromoform, DAMOISEAU: Identity of Arabinose with Lactose, KILIANI: Absorption of dark Heat rays by Gases and Vapors, LECHER and PERNER, 236.—Dust, Fogs, and Clouds, AITKEN, 237.—Relation between the Diurnal Range of the Magnetic Declination and Horizontal force, ELLIS, 238.—U. S. Coast and Geodetic Survey, PATTERSON, 240.—Magnetic Declination in Missouri, 241.

Geology and Mineralogy.—Pennsylvania Geological Survey, C. A. ASHBURNER, 241.—Report of Progress of the Geological Survey of Canada, for 1878-79, A. R. C. SELWYN: Monograph of the Silurian Fossils of the Girvan District in Ayrshire, H. A. NICHOLSON and R. ETHERIDGE, 243.—Revue de Géologie pour les Années, 1877 et 1878, DELESSE et LAPPARENT: Annelid Jaws from the Wenlock and Ludlow formations of the west of England, G. J. HINDE: Xenotime, from Burke County, N. C., W. E. HIDDEN: Geological Charts of the Yellowstone Park, and of the region adjoining on the south in the territories of Wyoming, Idaho and Utah, 244.

Botany and Zoology.—Power of Movement in Plants, C. DARWIN, 245.—Eucalyptographia, a Descriptive Atlas of the Eucalypts of Australia and the adjoining islands, F. v. MULLER, 249.—Flora of Essex County, Mass., J. ROBINSON: Botany of California, S. WATSON: Giant Squid (*Architeuthis*), A. E. VERRILL, 251.

Miscellaneous Scientific Intelligence.—Zeitschrift für Instrumentenkunde: Organ für Mittheilungen aus dem gesammten Gebiete der wissenschaftlichen Technik: Academy of Sciences, Paris, B. A. GOULD: Bibliographie Générale de l'Astronomie, J. C. HOUZEAU and A. LANCASTER, 253.—Washburn Observatory, University of Wisconsin: A Text Book of Elementary Mechanics for the use of Colleges and Schools, E. S. DANA: Massachusetts Institute of Technology, 254.