

## NUMBER CLXII.

	Page
ART. XLIX.—The Sufficiency of Terrestrial Rotation for the Deflection of Streams; by G. K. GILBERT, .....	427
L.—Examination of Wallace's Modification of the Physical Theory of Secular Changes of Climate; by JAS. CROLL, .....	432
LI.—Marsupial from the Colorado Miocene; by W. B. SCOTT, .....	442
LII.—Method of obtaining Autographic Records of the Free Vibrations of a Tuning-fork; by A. G. COMPTON, .....	444
LIII.—Volcanic Rocks of the Great Basin; by ARNOLD HAGUE and J. P. IDDINGS, .....	453
LIV.—Transition from the Copper-bearing Series to the Potsdam; by L. C. WOOSTER, .....	463
LV.—Expression of Electrical Resistance in Terms of Velocity; by F. E. NIPHER, .....	465
LVI.—Lateral Astronomical Refraction; by J. M. SCHAEBERLE, .....	466
LVII.—Kaolinite, from Red Mountain, Col.; by R. C. HILLS, .....	472
LVIII.—The Influence of Convection on Glaciation; by G. F. BECKER, .....	473
LIX.—A new Dinichthys from the Portage Group of Western New York; by E. N. S. RINGUEBERG, .....	476
LX.—Mineralogical Notes; by E. S. DANA, .....	479

## SCIENTIFIC INTELLIGENCE.

- Chemistry and Physics.*—New determination of Atomic weights, MARIGNAC, 482.—New reaction of Ethyl Carbamate, ARTH: Synthesis of a Glucoside of Tartaric acid, GUYARD: Physical Isomerism of Camphol-urethanes, HALLER, 483.—Relation between the Capillary constant of a Liquid and its Chemical composition, SCHIFF, 484.—Discovery of the Periodic Law and on relations among the Atomic weights, J. A. R. NEWLANDS: Absorption Spectra of Water, 485.—Magnetic effect of Electrical Convection, LECHER: Hall's phenomenon, LEDUC, 486.—Text Book of the Principles of Physics, A. DANIELL: Measurements in Electricity and Magnetism, A. GRAY, 487.—Heat, P. G. TAIT, 488.
- Geology and Natural History.*—Genera of Fossil Cephalopods, A. HYATT, 488.—Geological History of Serpentes, T. S. HUNT, 489.—The Taconic question in Geology, T. S. HUNT: Syrian Molluscan Fossils, from Mt. Lebanon, C. E. HAMLIN, 490.—Recherches sur les Terrains Anciens des Asturies de la Galice, C. BARROIS, 491.—Fossil Sponges in the British Museum, G. J. HINDE: Origin of the Italian Serpentine, B. LORTI: Phosphatic deposits in Alabama, 492.—Allgemeine und Chemische Geologie, J. ROTH: Third Annual Report of the State Mineralogist of California: Brief notices of some recently described Minerals, 493.—Clematides Megalanthes, Les Clématites, etc., A. LAVALLÉE, 494.—Porto Rico Plants: Erythræe Exsiccatae quas distribuit V. B. WITTRÖCK, 495.
- Miscellaneous Scientific Intelligence.*—British Association at Montreal, 496.—American Association: Peabody Museum of American Archæology, 497.—Aboriginal American Authors and their Productions: The Gœgüence, 498.
- INDEX TO VOLUME XXVII, 499.

## ERRATUM.

Page 19, the top line should read:

"a stop cock in the tube *f* is then turned, cutting off the Sprengel pump;"